

**ORILAND**  
What Origami Can Be!

# Oriland Magic Star

*Yuri & Katrin Shumakov*



**Action Origami Series**



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## Introduction

ORILAND MAGIC STAR is a book from Action Origami Series by Oriland authors that will teach you how to create mesmerizing action models – fabulous variations of the one and only Oriland Magic Star! The Magic Star is a star-like shaped polyhedral torus that can be rotated, so its approximated torus surface constantly transforms with sections squeezing in the centre and straightening at the ‘equator’, while you do see the changing pattern of folds and colours that has a mesmerizing effect!

Experience the mystery of Oriland Magic Star firsthand! Do-It-Yourself – fold these fantastic action models, originally designed by Yuri and Katrin Shumakov – 7-Point Magic Star (6 Strips, 2:8), Magic Star (6 Strips, 2:8), Magic Star (6 Strips, 2:9), Magic Star (12 Strips, 2:5), Magic Star (48 Squares) and One-Piece Magic Star.

As a good addition this book offers authors’ article ‘Mystery of Oriland Magic Star’, which will introduce you a story of this starry model with all its different variations and give practical advises as well. There are 360 detailed step-by-step colorful diagrams with extensive comments, placed on 89 pages that will guide you through folding the 6 original origami designs of the Oriland style. The ‘Photo Gallery’ section shows you pictures of all the designs presented in the book. The ‘Origami Symbols’ section is explaining international origami symbols to help you to read diagrams for folding. In each article, there are recommendations on paper size and indication to the model size resulting from the size of starting paper. The models are intermediate and complex level of folding as shown by stars in the book and are a good challenge for the experienced folder and the expert alike. Happy folding!

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# Photo Gallery



**7-Point Magic Star  
(6 Strips, 2:8)**

**p. 8**



**p. 14**

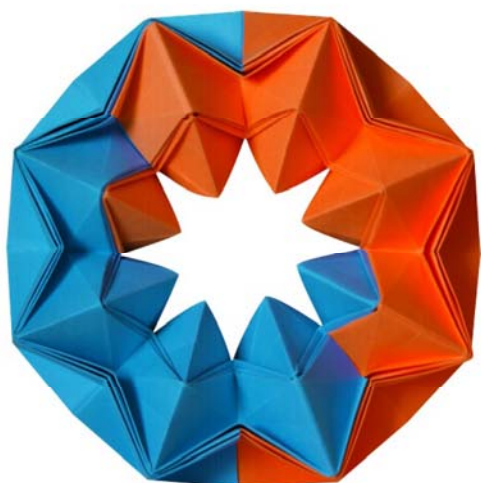
**Magic Star  
(6 Strips, 2:8)**



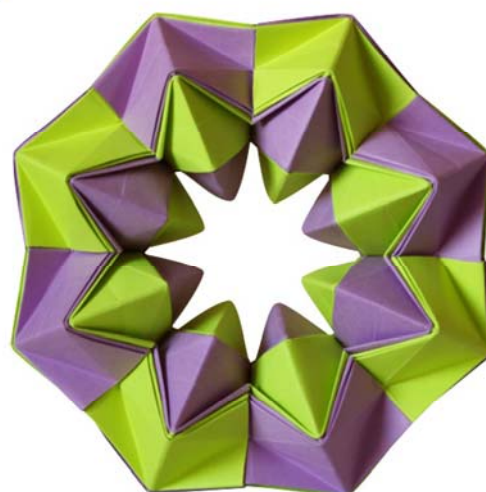
**p. 21**

**Magic Star  
(6 Strips, 2:9)**





**Magic Star  
(12 Strips, 2:5)  
p. 28**



**Magic Star  
(48 Squares)  
p. 38**



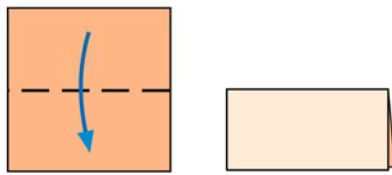
**One-Piece  
Magic Star  
p. 66**



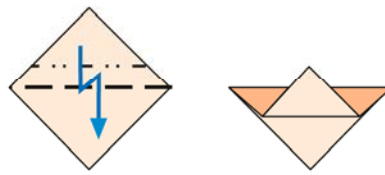


# Origami Symbols

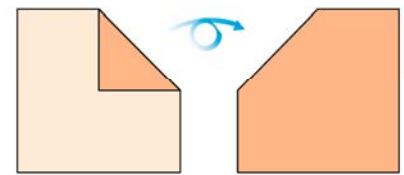
These simple origami symbols will help you to read diagrams of folding.



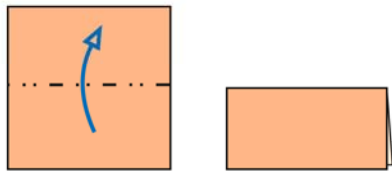
Valley fold



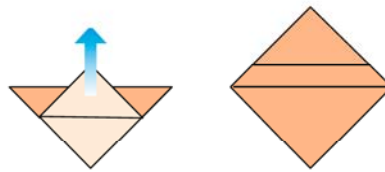
Step fold



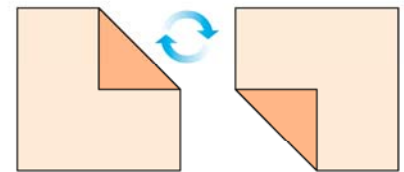
Turn the paper over



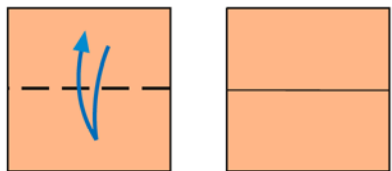
Mountain fold



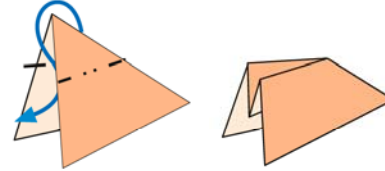
Pull out



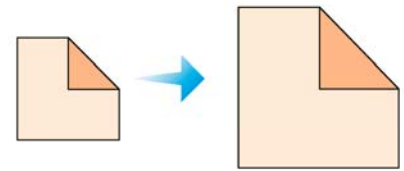
Turn the paper around



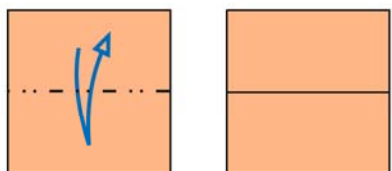
Valley fold and unfold



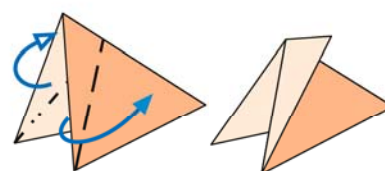
Inside reverse fold



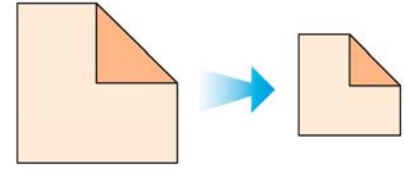
Enlarging the following diagram



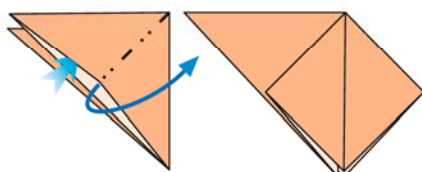
Mountain fold and unfold



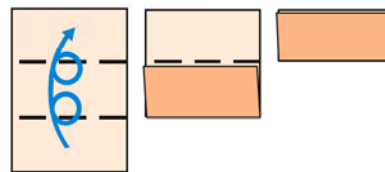
Outside reverse fold



Reduction the following diagram



Open and squash



Fold the paper over and over

Push in. Sink



X-ray view

.....

## Level of folding

- ☆☆☆☆☆ Simple
- ☆☆☆☆☆ Simple-Medium
- ☆☆☆☆☆ Medium
- ☆☆☆☆☆ Medium-Complex
- ☆☆☆☆☆ Complex

The system of levels of folding is more as a guide line, an approximate approach just to orient you and mostly depends of your skills in paper folding. If you are a novice, even the simple level can be challenging for you. And if you are already a connoisseur even a complex model can be simple for you.



# Mystery of Oriland Magic Star

The Magic Star, an original action model, was invented in far 1997 by Yuri Shumakov, one of Oriland creators. It is a polyhedral torus, star-like shaped, that can be rotated, so its approximated torus surface is changing with sections squeezing in the centre and straightening at the 'equator'. First contemplated and designed to be folded from a single piece of paper, the Magic Star has been developed into several multi-piece variants of similarly looking stars, each folded from several pieces of paper in order to involve the play of colours. When the star is rotated you do see the changing pattern of folds and colours that has a mesmerizing effect.

It this book, we will reveal the mystery of Oriland Magic Star folding and show you all these variants of the Magic Star that despite their visual similarity can be globally divided on One-Piece Magic Star and Multi-Piece Magic Stars.

Speaking of the one-piece Magic Star... on the one hand it's surely appealing for origami puritans because you will need just one big piece of paper, but on the other hand it is rather complex in aspects of the folding process and assembly, not talking of lack of colour play; you will see only changing pattern of folds when rotating the star. Of course, you can paint this star into different colours, but it's another story. So, before you challenge yourself with this one-piece Magic Star, we would strongly recommend first to fold a multi-piece Magic Star to comprehend the folding and most importantly the assembly.



One-Piece Magic Star



Multi-Piece Magic Star from strips

The main purpose in developing the Multi-Piece Magic Stars was to use the play of colours to create this mesmerizing effect when the star is rotated. And each variant of the multi-piece Magic Star is offering a variety of colour combinations that can be achieved in each case. The multi-piece Magic Stars presented in the book can be categorized basing on: quantity of points of the star - 7-point Magic Star and 8-point Magic Stars; format of paper - folded from strips or from squares; quantity of pieces of paper - from 6 pieces, from 12 pieces and from 48 pieces.

All the multi-piece Magic Stars despite the category share the unified global structure – each of them consists of 6 ring-modules that have to be assembled into the star using the same method of assembly working for each of the multi-piece Magic Stars.

In different variations, the above mentioned ring-module can be folded from a strip or 2 strips, or 8 squares. Practically all the variants of the ring-module are using overlapping method of connection, except one variant with using transparent tape to connect the strip into the ring.



Multi-Piece Magic Star from squares



The process of folding of the ring-modules is not complex at all – you only have to diligently make all the necessary preliminary folds, which can be qualified as an intermediate level of folding. The main challenge is to assemble them into the magic star correctly, so it will require extra patience and concentration, which in the result will be greatly rewarded when you receive the working Magic Star!

The assembly is better to understand when connecting the ring-modules made from strips; in this way there is less of overlapping layers that may distract your attention from the process of the assembly or be occasionally displaced which can lead to an error of the assembly.

There is one more moment about the assembly, an 8-point Magic Star is much easier to assemble than a 7-point Magic Star, because the less tension of paper is involved into the process and the resulted design. On the same reason, the process of rotating is going much smoother with the symmetrical 8-point star than the asymmetrical 7-point star.

So, the suggested priority of folding the versions of the stars will be the following – first, to fold the multi-piece 8-point Magic Star from strips, then when mastered, to try the 8-point Magic Star from squares and 7-point Magic Star from strips if needed. And once you comprehended the folding and assembly of multi-piece Magic Stars, you may take a challenge in folding of the one-piece Magic Star.

General paper recommendations for these Magic Star designs include paper that is strong and flexible with tensile strength, as there will be a certain tension during the assembly of the star and during its further rotation. It can be one-colour paper, identical from both sides, as the back side of paper never appears on the star surface and therefore it doesn't matter what colour is on the back of paper.



Multi-Piece Magic Star  
from squares of regular  
origami paper

When folding multi-piece Magic Stars, be sure to take papers of equal thickness and flexibility. A variety of papers are working well for these stars from colour copy paper to regular origami paper and even fancy Chiyogami. We'll give specific paper recommendations in each of variants of Magic Stars. Anyway choose paper carefully as the Magic Star involves lots of folding, that the paper should endure and still be in good condition on the resulted model.



Multi-Piece Magic Star from  
Chiyogami squares

Hope you will enjoy this book with all the techniques presented here to make this mesmerizing action model and get the insight into the mystery of Oriland Magic Star firsthand!

So study the diagrams thoroughly, prepare the appropriate paper and have challenging origami fun! We do believe that Origami is entertainment for the Soul, gymnastics for the Mind and training for the Hands!

Happy folding!

The Authors,  
Katrin and Yuri Shumakov

[www.oriland.com](http://www.oriland.com)





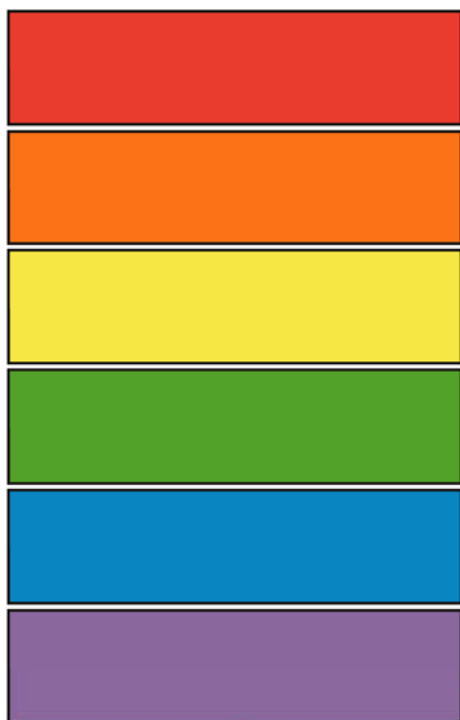
# 7-Point Magic Star (6 strips, 2:8)

by Yuri Shumakov

This multi-piece Magic Star has 7 points and consists of 6 ring-modules. Each ring-module is folded from a strip of paper, 1:4 (2:8) in proportion, with the overlapped method. Therefore you will need in 6 rectangles of paper. The multi-piece Magic Star allows using the play of colours to create the mesmerizing effect when the star is rotated. In comparison with the symmetrical 8-point Magic Stars, the assembly of the asymmetrical 7-point Magic Star involves more tension of paper and requires more patience and skills. So if you fold the Magic Star for the first time, it's better to start from the 8-point Magic Star.

Suggested colours: 6 spectral colours of the rainbow work best for this design, namely: red, orange, yellow, green, blue, and violet. So you will need one rectangle per colour. It's also possible to use just 2 complementary colours like red and green, blue and orange, yellow and violet. In this case you will need 3 rectangles of each colour.

Suggested paper: colour copy paper, craft paper etc. Paper should be strong and flexible with tensile strength, as there will be a certain tension during the assembly of the star and during its further rotation. It can be one-colour paper, identical from both sides.



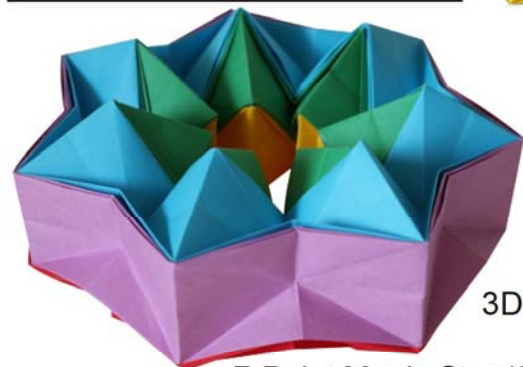
Suggested sizes: It's advisable to take large rectangles of paper to master the whole model, for instance 4 x 16 inches (10x40 cm) in size, in this case the diameter of the finished 7-point star will be measuring 4 3/8 inches (11 cm). Or you can start with even larger rectangle, say 6 x 24 inches (15x60 cm) in size with the diameter of the resulted 7-point star as 6 5/8 inches (16.5 cm).

When mastered, you can try the smaller sizes and for example use sheets of A4 (European format) or Letter (North American format) in size to make the 1:4 rectangles from the longest side of the sheets. So, if using Letter format (11 x 8.5 inches), make 6 rectangles, 11x2 3/4 inches each. In this case diameter of the finished star will be measuring about 3 inches.

If using A4 format (29.7 x 21 cm), make 6 rectangles, 29.7 x 7.4 cm each. In this case diameter of the finished star will be measuring about 8.2 cm.

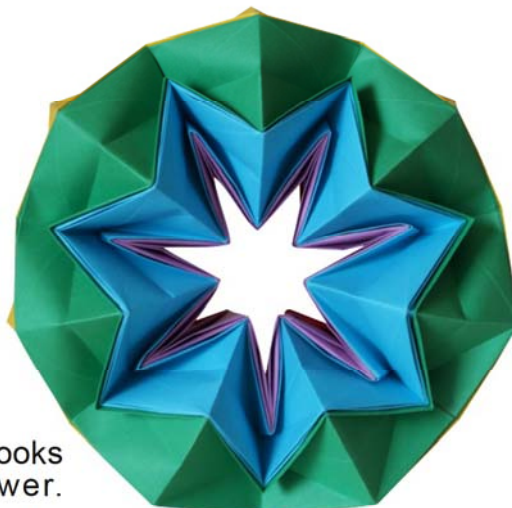


The diameter of the finished 7-point star will be measuring about on 1/10 longer than the short side of the initial rectangle, as pictured.



3D View.

Back side looks like a flower.



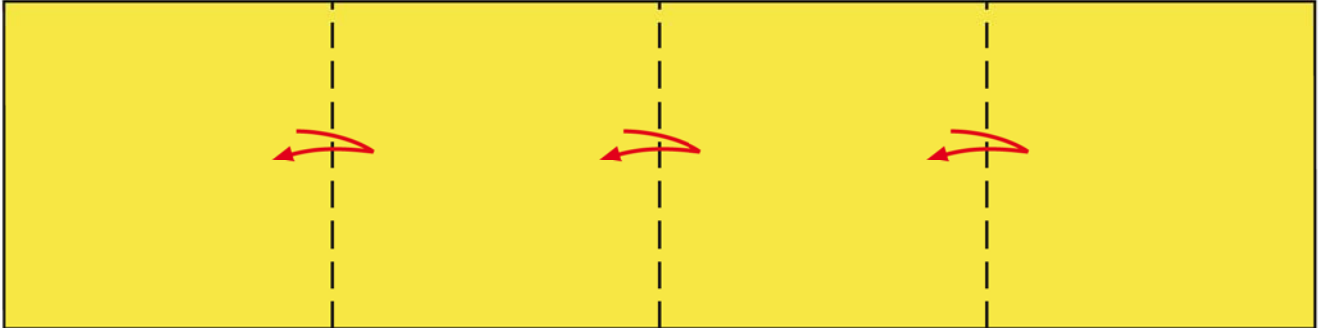
7-Point Magic Star (6 strips, 2:8) © 1997 Yuri Shumakov - page 1



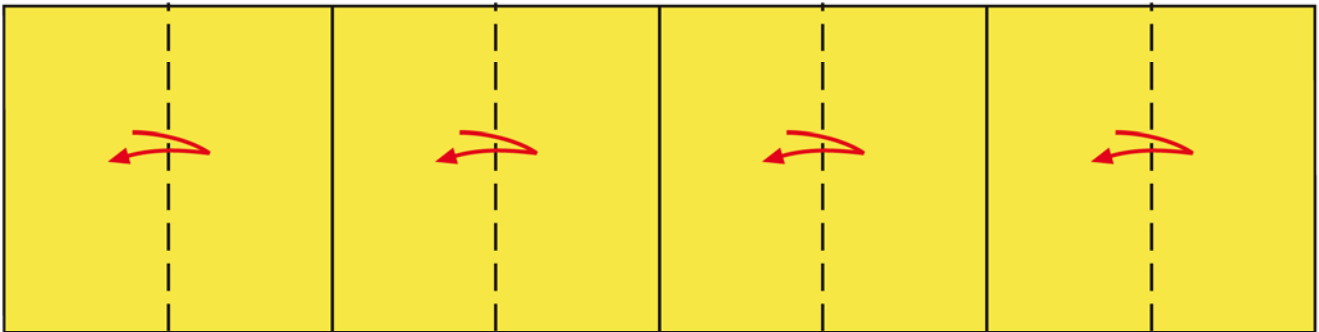
## Ring-Module

If using two-color paper, begin with coloured side up.

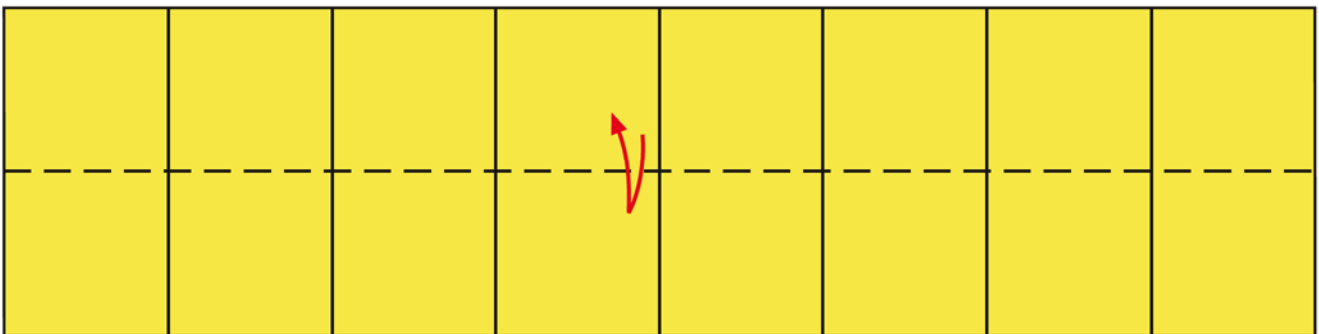
- 1 Place the rectangle lengthways. By valley folding, divide the rectangle in 4 equal vertical sections.



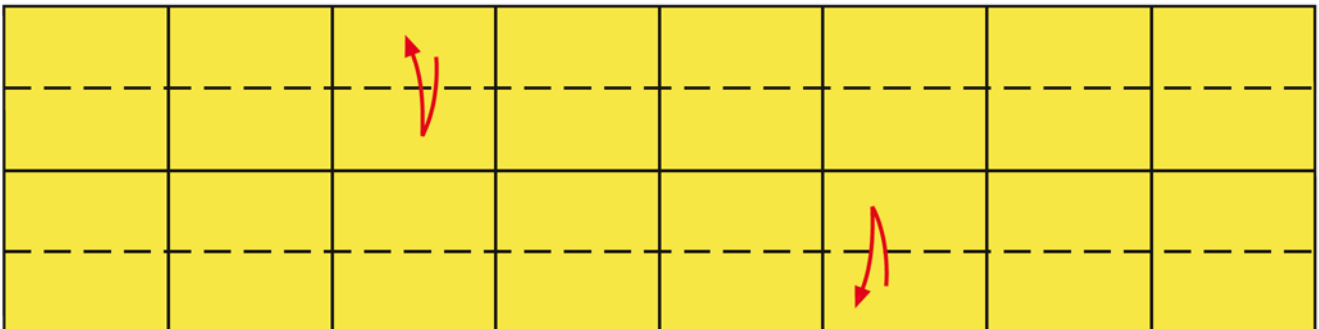
- 2 Valley fold and unfold each vertical section in half, thereby dividing the rectangle in 8 equal vertical sections.



- 3 Valley fold bottom edge up, dividing the rectangle in half, as shown. Press the fold flat and unfold it.



- 4 Valley fold and unfold each horizontal section in half, thereby dividing the rectangle in 4 equal horizontal sections. Then, turn the paper over.





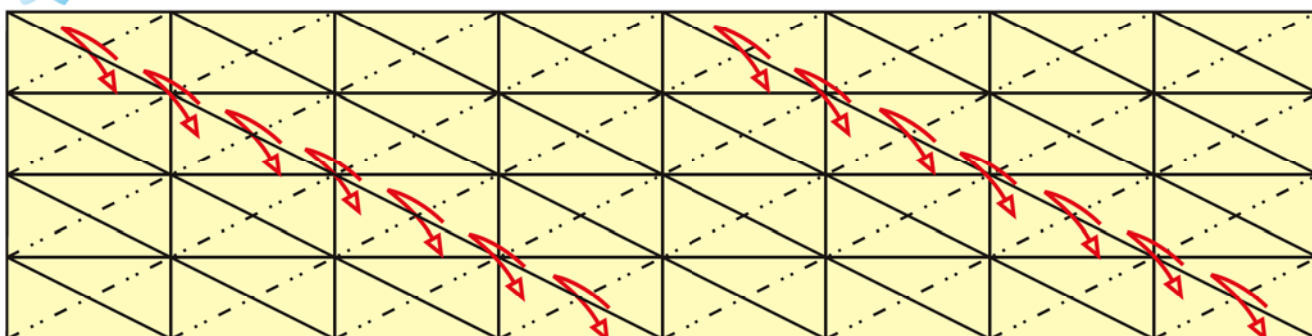
5

Working in one direction, make the diagonal fold-line over each rectangle by 'mountain' folding. It's comfortable to make these diagonals 'on hands' i.e. on each rectangle pinch the corners planning the diagonal and then make the 'mountain' fold between these points.



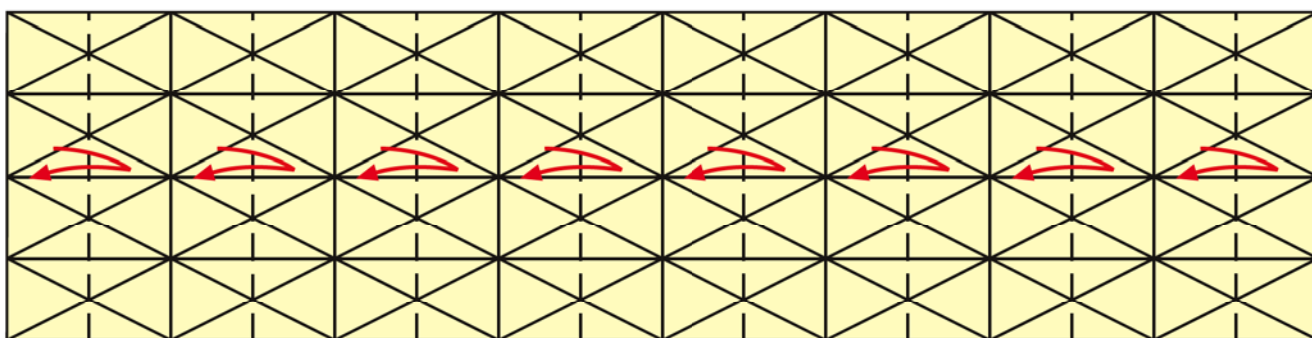
6

Now working in another direction, make the second diagonal fold-line over each rectangle, as shown.



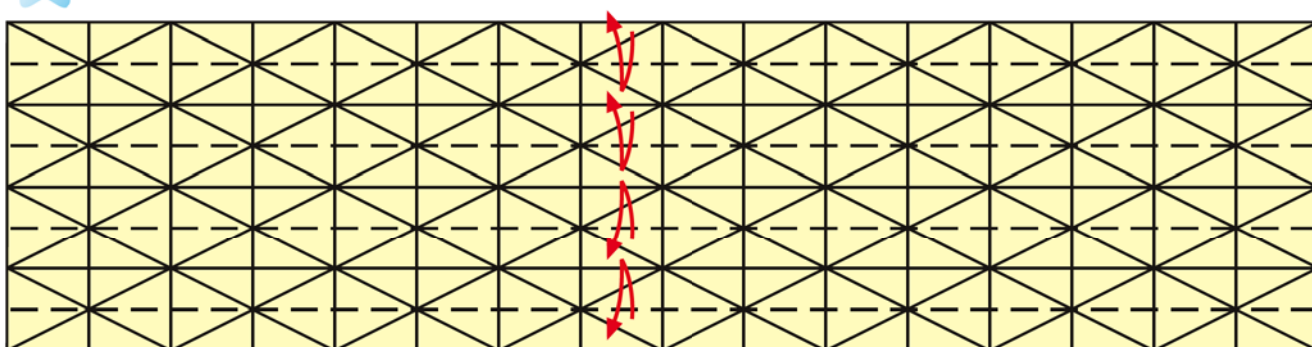
7

Valley fold and unfold each vertical section in half, thereby dividing the rectangle in 16 equal vertical sections.



8

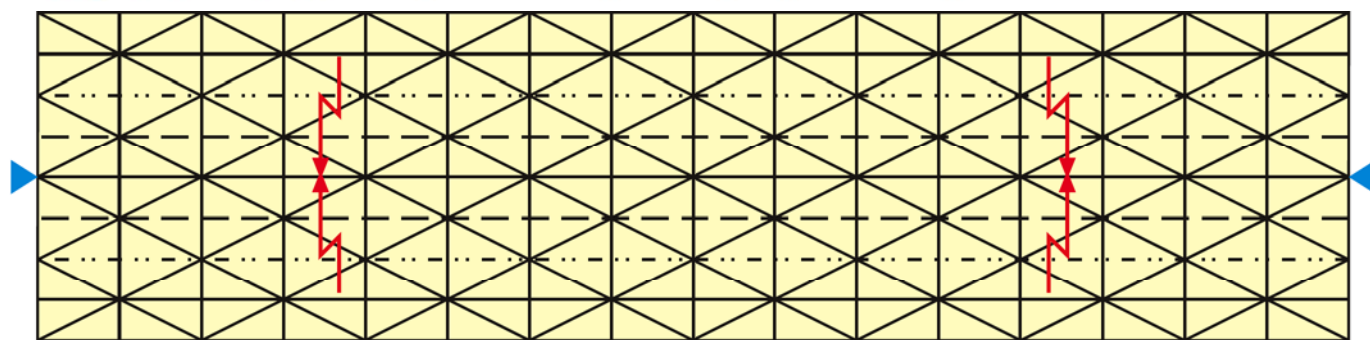
Valley fold and unfold each horizontal section in half, thereby dividing the rectangle in 8 equal horizontal sections.





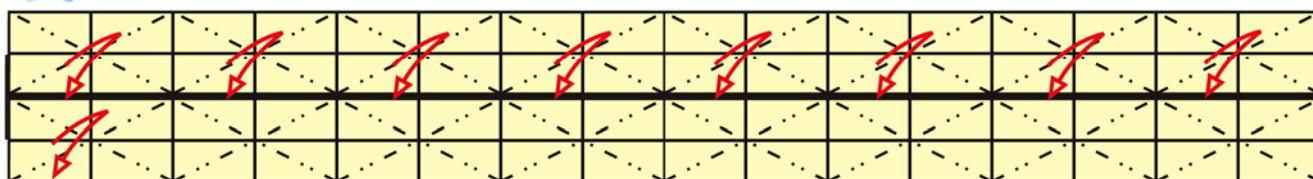
9

This should be the result. Double step fold the top and bottom parts of paper to the horizontal middle fold-line as shown.



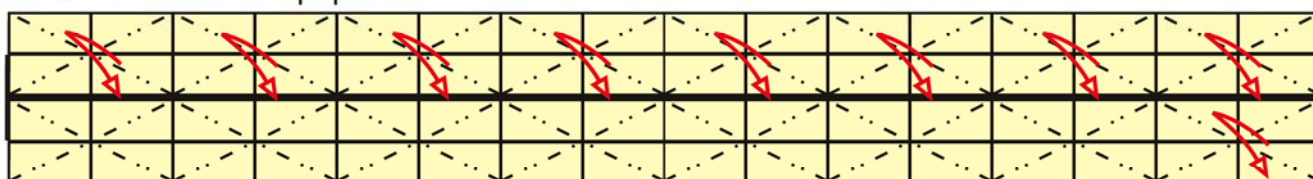
10

Working with all the layers, re-fold the 'mountain' folds in one direction.



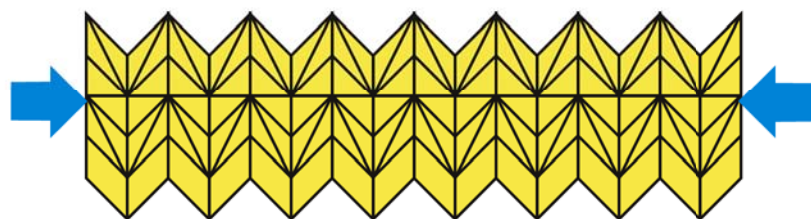
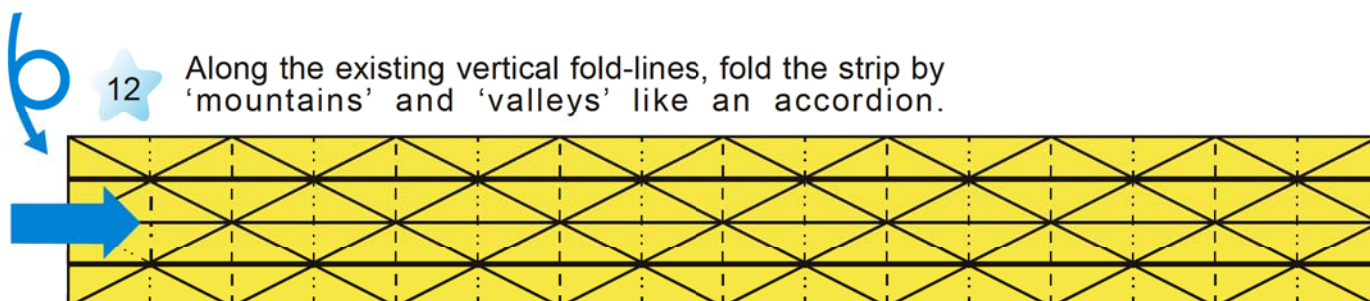
11

Continue working with all the layers and re-fold the 'mountain' folds in another direction. Then turn the paper over.



12

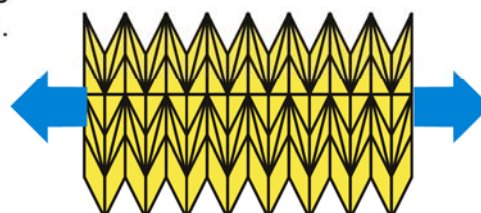
Along the existing vertical fold-lines, fold the strip by 'mountains' and 'valleys' like an accordion.



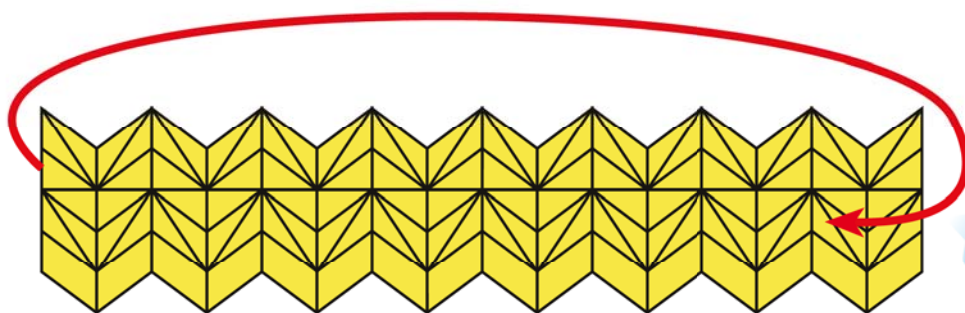
13

This should be the result. Press the folds together and then release them.

14





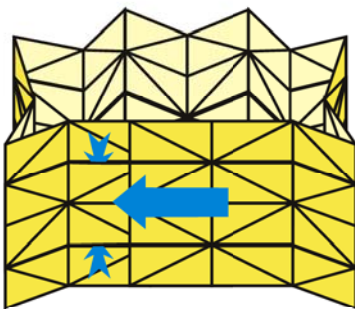


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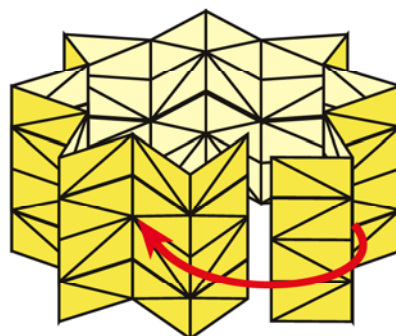
Now we need to connect the strip into a ring. Bring the left-hand side round to meet the right-hand side.

17

Inserting the layers of the right-hand end into the double step-folds of the left-hand end, slide the paper, so the 2 sections of the right-hand end completely cover the 2 sections of the left-hand end.

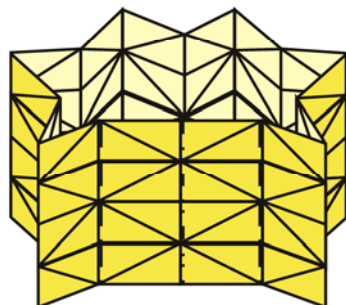


16



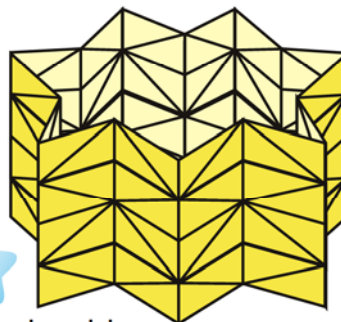
This should be the result. Now 2 sections will overlap the other 2 sections.

18



This should be the result. Now make 'valleys' and 'mountain' folds over the connected sections, thereby locking the connection.

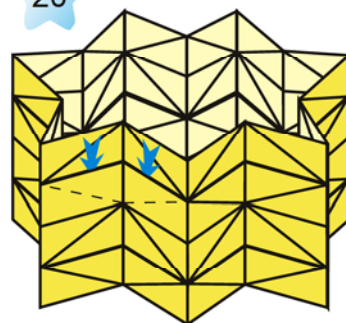
19



This should be the result.

20

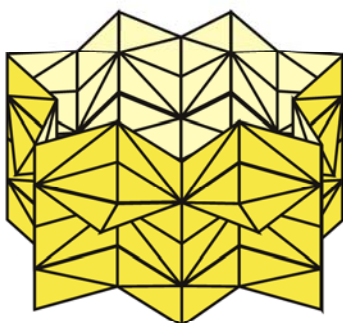
Working with one double section, separate the layers of the step-fold as shown and along the existing fold-lines valley fold the border into a cornice-like position.



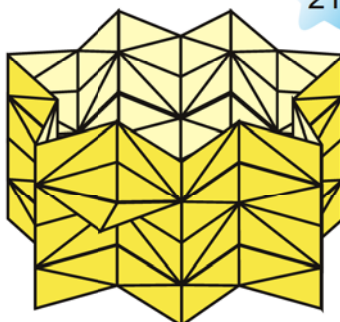
21

This should be the result. Repeat step 20 for each of the 6 remaining double sections.

22



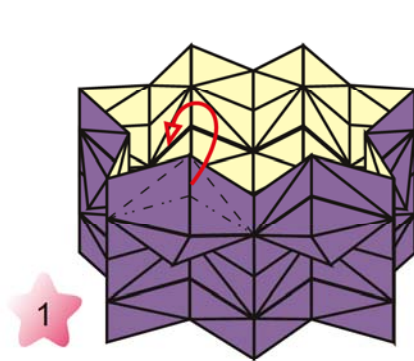
Here is the completed Ring-Module!



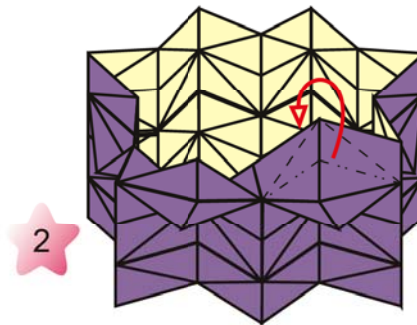


## The Last Ring-Module Is Special!

As you prepared all 6 Ring-Modules, take the last one you will use in the assembly as the final module and make additional folds on it as shown.

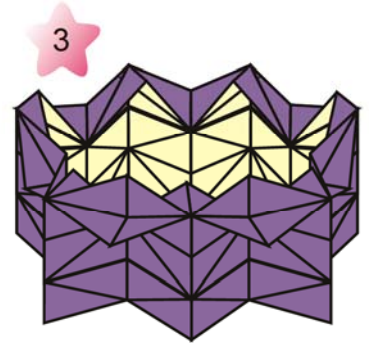


Working with the upper edge of the one double section, fold it along the existing fold-lines into a position shown in the next step.



This should be the result. Now repeat with each upper edge of double sections, including the place where the layers overlap and pay attention to the folds so they go through both layers as if they are one.

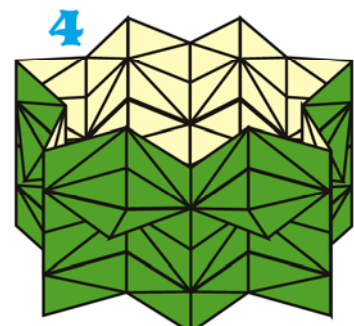
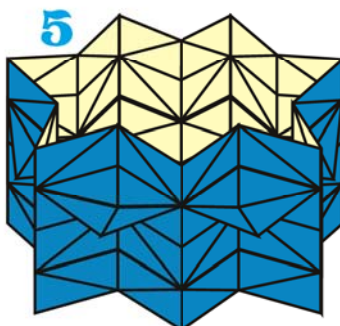
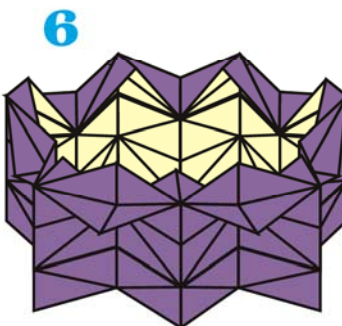
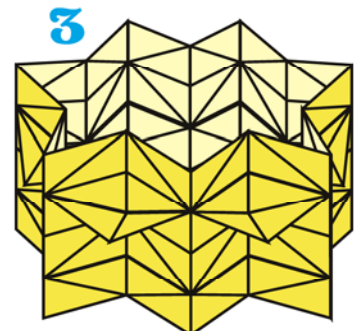
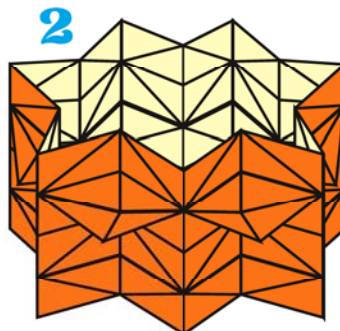
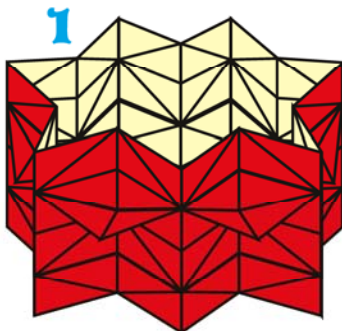
Here is the completed special last Ring-Module!



## 6 Ring-Modules

Now you should have all 6 Ring-Modules, including the special last Ring-Module, ready for the assembly.

Go to the article 'Multi-Piece Magic Star Assembly' and diligently follow to the instructions to assemble your 7-Point Magic Star!



**>>> jump to 'Multi-Piece Magic Star Assembly' article >>>**





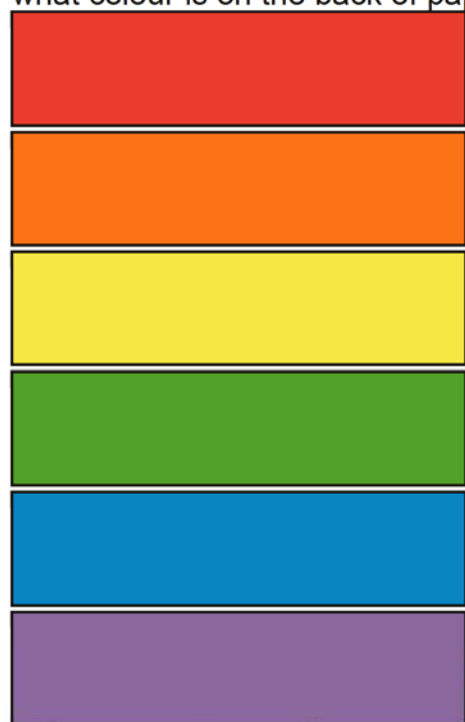
# Magic Star (6 strips, 2:8)

by Yuri Shumakov

This multi-piece Magic Star has 8 points and consists of 6 ring-modules. Each ring-module is folded from a strip of paper, 1:4 (2:8) in proportion, and connected into a ring with transparent adhesive tape. The 8-Point Magic Star is easier to assemble than the 7-Point Magic Star, because the less tension of paper is involved into the process and the resulted design. On the same reason, the process of rotating is going smoother with this symmetrical 8-point star than the asymmetrical 7-point star. The multi-piece Magic Star allows using the play of colours to create the mesmerizing effect when the star is rotated.

Suggested colours: 6 spectral colours of the rainbow work best for this design, namely: red, orange, yellow, green, blue, and violet. So you will need one rectangle per colour. It's also possible to use just 2 complementary colours like red and green, blue and orange, yellow and violet. In this case you will need 3 rectangles of each colour.

Suggested paper: colour copy paper, craft paper etc. Paper should be strong and flexible with tensile strength, as there will be a certain tension during the assembly of the star and during its further rotation. It can be one-colour paper, identical from both sides, as the back side of paper never appears on the star surface and therefore it doesn't matter what colour is on the back of paper.

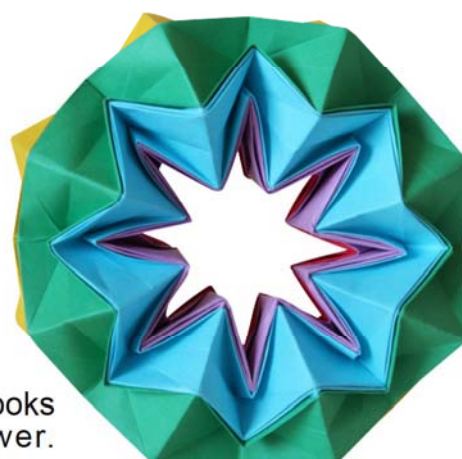


Suggested sizes: It's advisable to take large rectangles of paper to master the whole model, for instance 4 x 16 inches (10x40 cm) in size, in this case the diameter of the finished 8-point star will be measuring 5 inches (12.5 cm). Or you can start with even larger rectangle, say 6 x 24 (15x60 cm) inches in size with the diameter of the resulted 8-point star as 7 1/2 inches (18.75 cm).

When mastered, you can try the smaller sizes and for example use sheets of A4 (European format) or Letter (North American format) in size to make the 1:4 rectangles from the longest side of the sheets. So, if using Letter format (11 x 8 1/2 inches), make 6 rectangles, 11x2 3/4 inches each. In this case diameter of the finished star will be measuring about 3 1/2 inches. If using A4 format (29.7 x 21 cm), make 6 rectangles, 29.7 x 7.4 cm each. In this case diameter of the finished star will be measuring about 9.3 cm.



The diameter of the finished 8-point star will be measuring about on 1/4 longer than the short side of the initial rectangle, as pictured.



3D View.

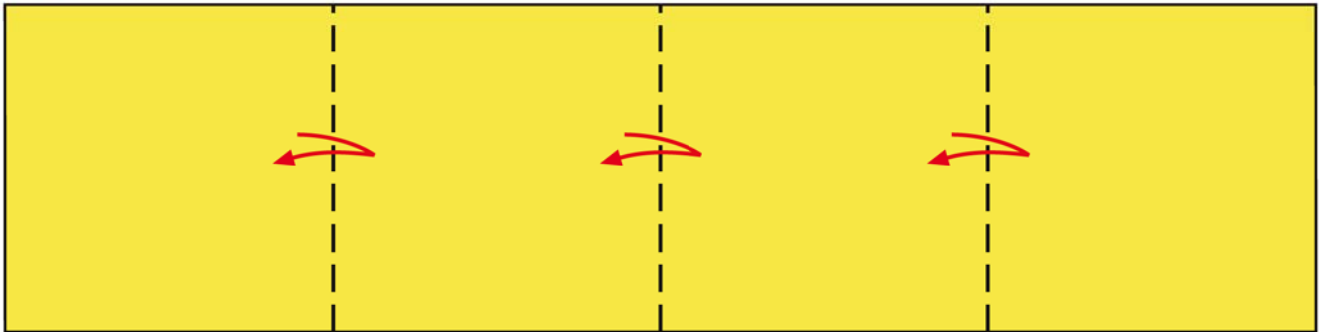
Back side looks like a flower.



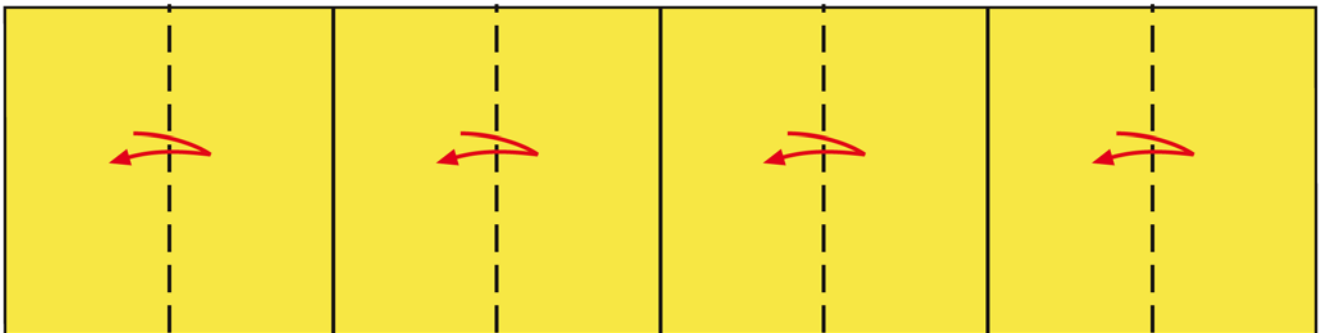
## Ring-Module

If using two-color paper, begin with coloured side up.

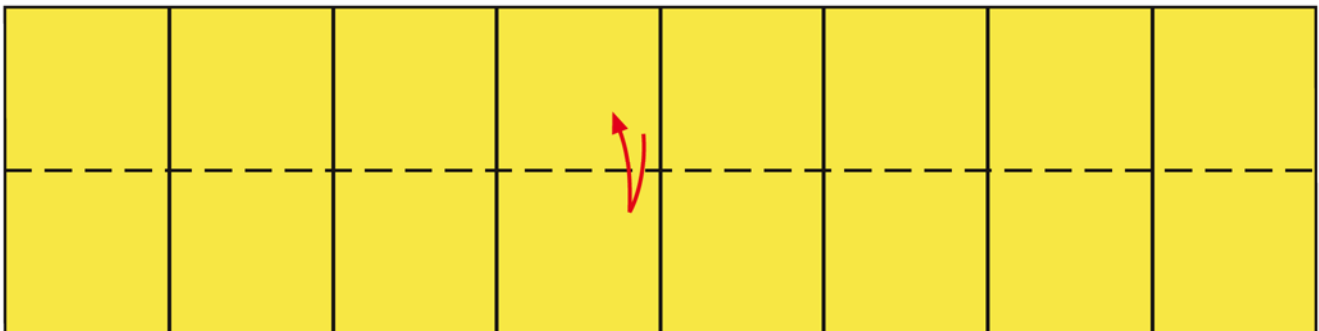
- 1 Place the rectangle lengthways. By valley folding, divide the rectangle in 4 equal vertical sections.



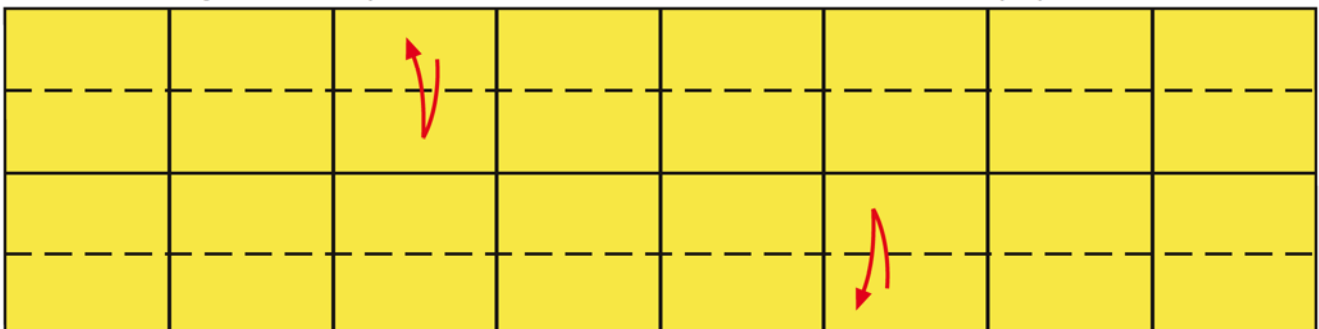
- 2 Valley fold and unfold each vertical section in half, thereby dividing the rectangle in 8 equal vertical sections.



- 3 Valley fold bottom edge up, dividing the rectangle in half, as shown. Press the fold flat and unfold it.



- 4 Valley fold and unfold each horizontal section in half, thereby dividing the rectangle in 4 equal horizontal sections. Then, turn the paper over.





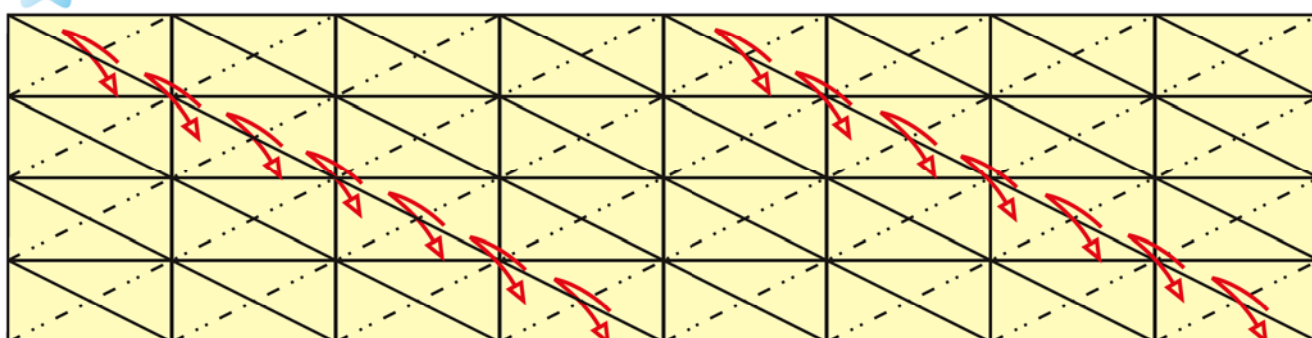
5

Working in one direction, make the diagonal fold-line over each rectangle by 'mountain' folding. It's comfortable to make these diagonals 'on hands' i.e. on each rectangle pinch the corners planning the diagonal and then make the 'mountain' fold between these points.



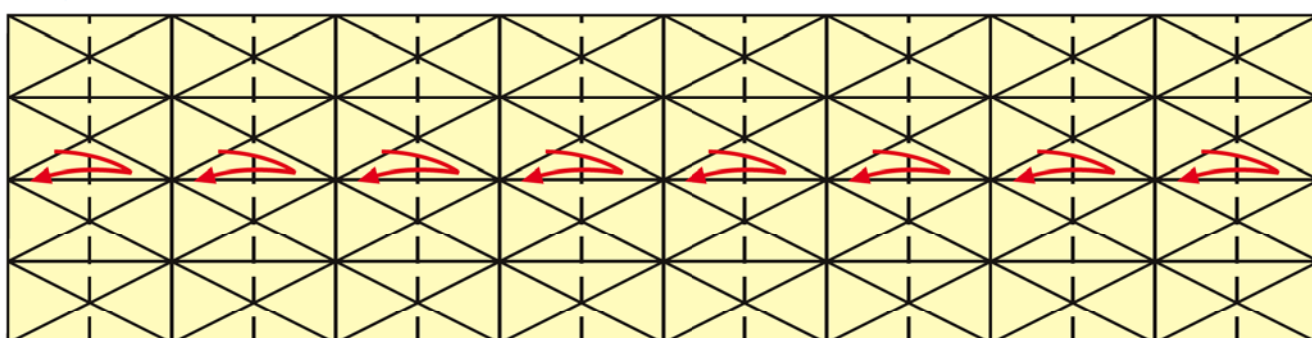
6

Now working in another direction, make the second diagonal fold-line over each rectangle, as shown.



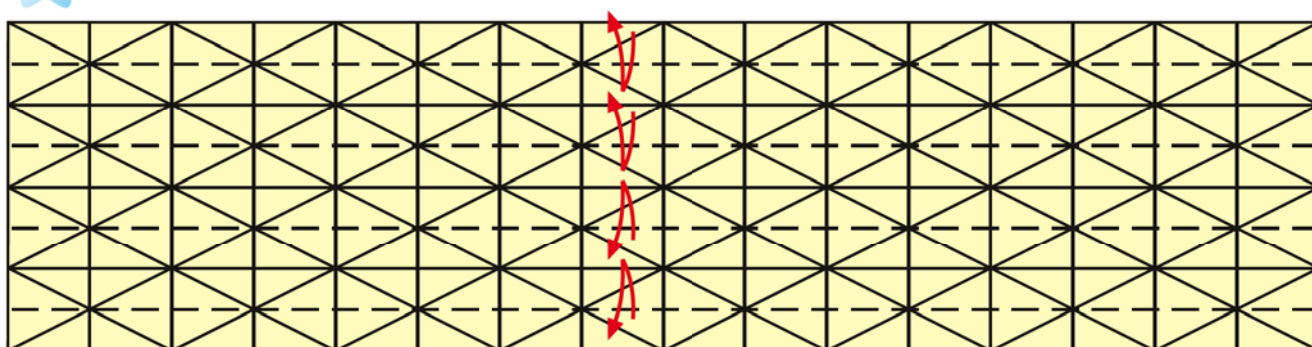
7

Valley fold and unfold each vertical section in half, thereby dividing the rectangle in 16 equal vertical sections.



8

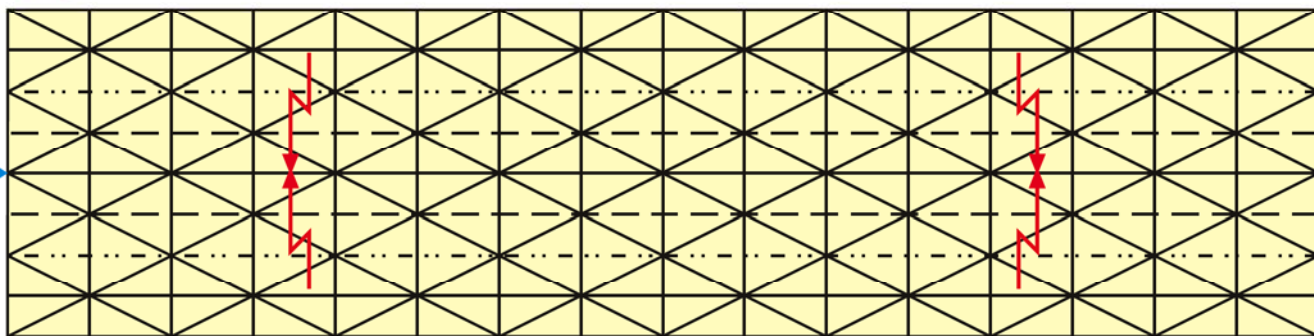
Valley fold and unfold each horizontal section in half, thereby dividing the rectangle in 8 equal horizontal sections.





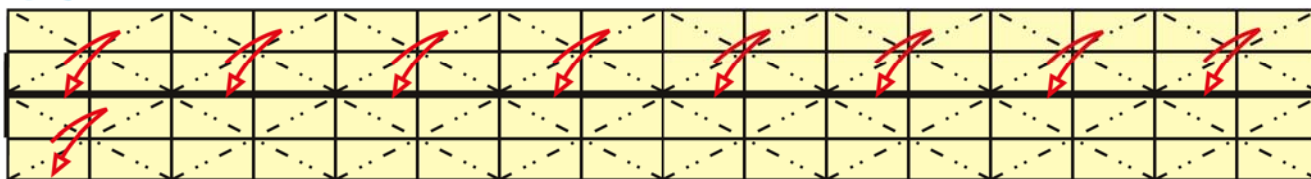
9

This should be the result. Double step fold the top and bottom parts of paper to the horizontal middle fold-line as shown.



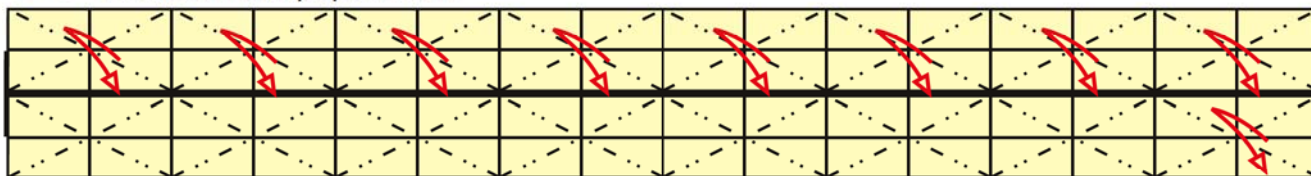
10

Working with all the layers, re-fold the 'mountain' folds in one direction.



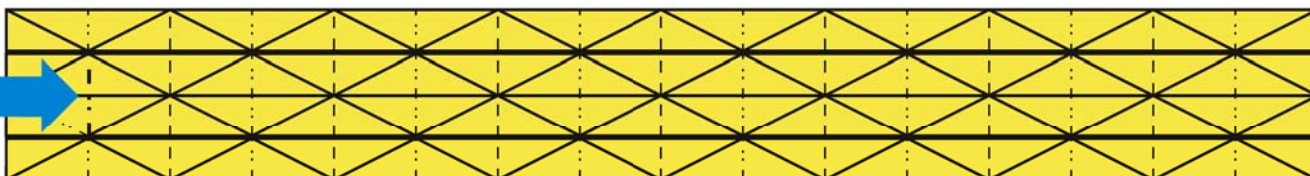
11

Continue working with all the layers and re-fold the 'mountain' folds in another direction. Then turn the paper over.



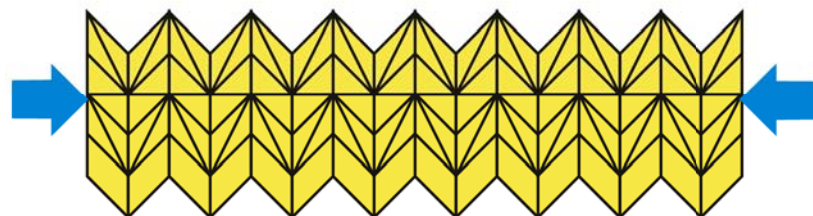
12

Along the existing vertical fold-lines, fold the strip by 'mountains' and 'valleys' like an accordion.

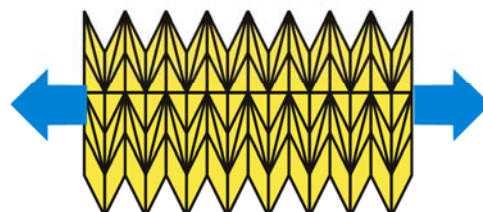


13

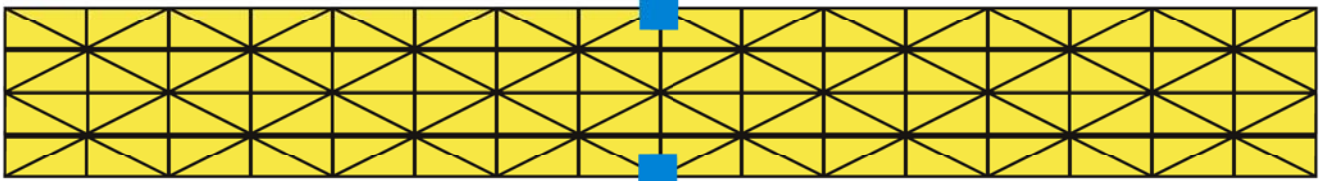
This should be the result. Press the folds together and then stretch them into the strip again.



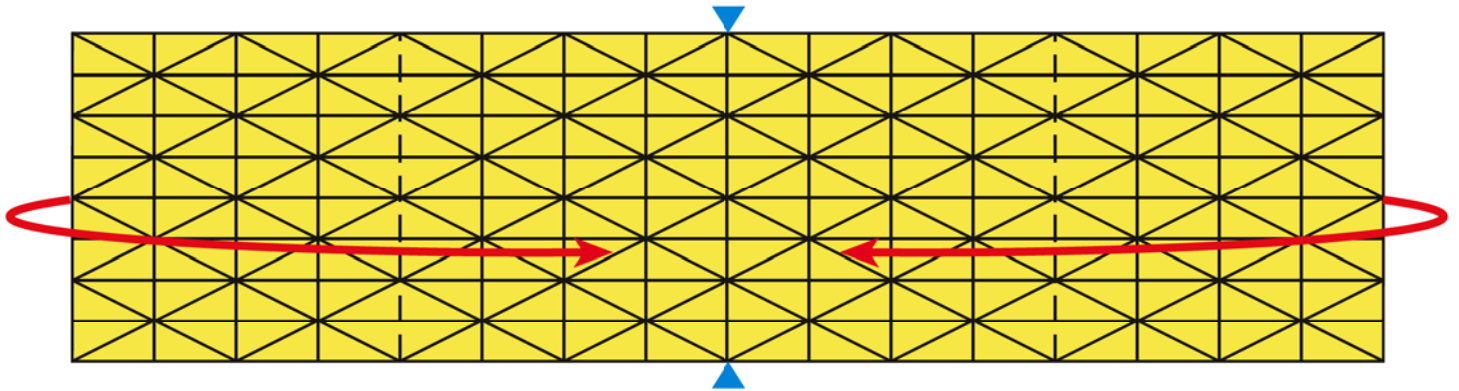
14



15 Unfold the double step folds.

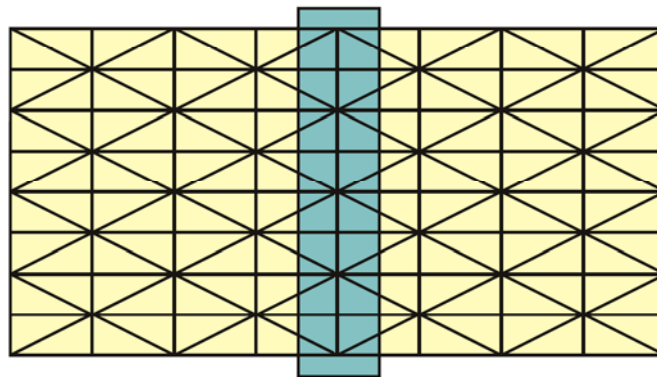


16 Note, that the paper should be by the coloured side up. Fold the sides to meet the vertical middle fold-line as shown.



17

Carefully apply an appropriate piece of transparent adhesive tape to connect the adjacent ends of the front layer together.

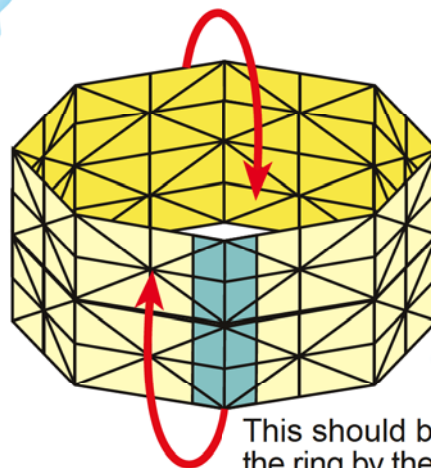
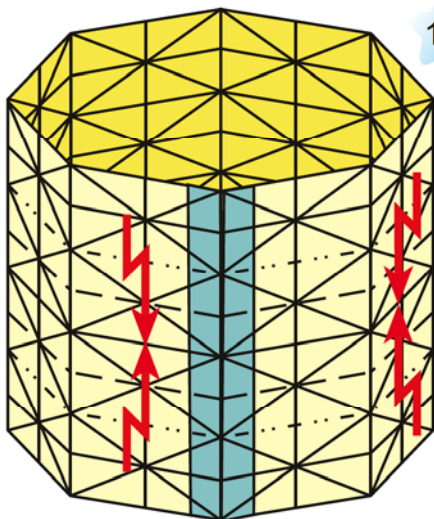


Take the piece a little bit bigger as shown, so that you can fold the top and bottom edges of the tape back to envelope the front layer and therefore to ensure the connection.

Now you have the strip connected into the ring.

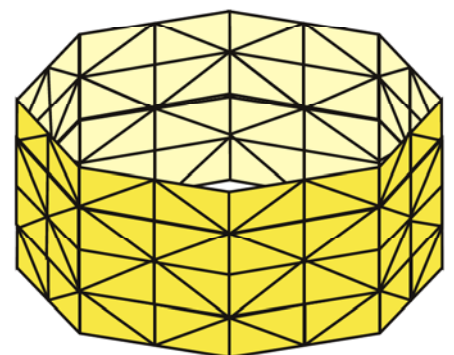
Along the existing fold-lines, double step fold the top and bottom parts to the horizontal middle fold-line as shown.

18



19

This should be the result. Now turn the ring by the coloured side outside.

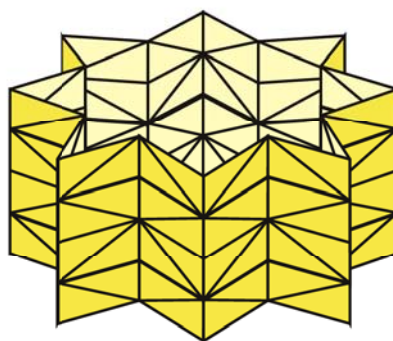
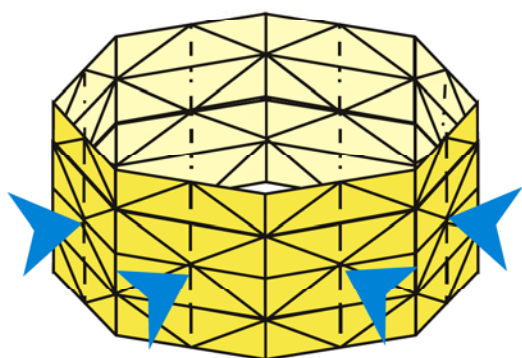


20

This should be the result.

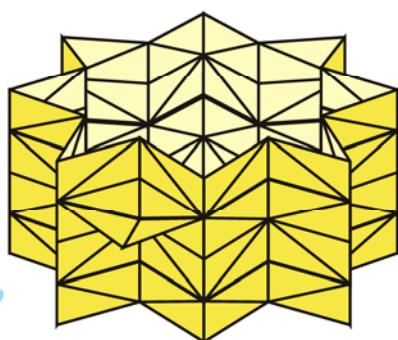


- 21 Along the existing fold-lines, form the 'valley' folds on the ring.



22

This should be the result.

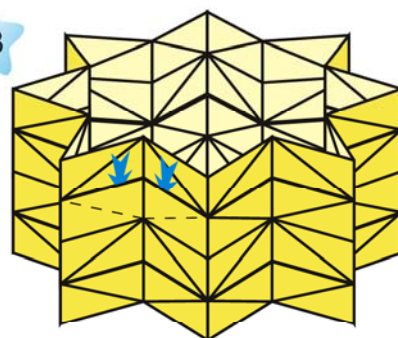


24

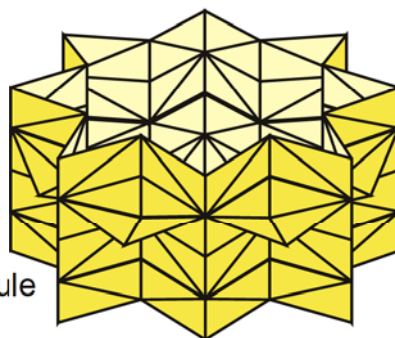
This should be the result. Repeat step 23 for each of the 7 remaining double sections.

Working with one double section, separate the layers of the step-fold as shown and along the existing fold-lines valley fold the border into a cornice-like position.

23



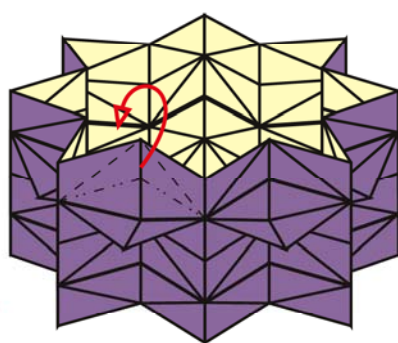
25



Here is the completed Ring-Module for 8-Point Magic Star!

## The Last Ring-Module Is Special!

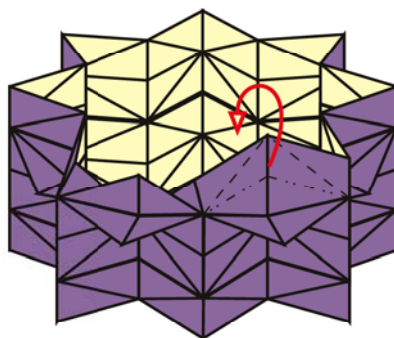
As you prepared all 6 Ring-Modules, take the last one you will use in the assembly as the final module and make additional folds on it as shown.



1

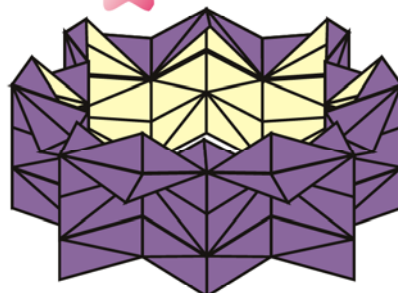
Working with the upper edge of the one double section, fold it along the existing fold-lines into a position shown in the next step.

2



This should be the result. Now repeat with each upper edge of double sections, including the place where the layers overlap and pay attention to the folds so they go through both layers as if they are one.

3



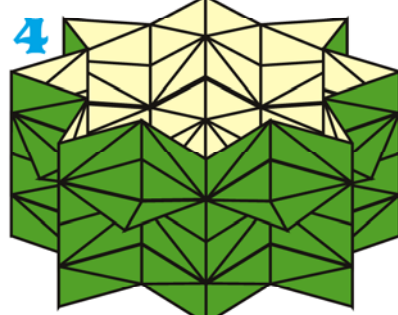
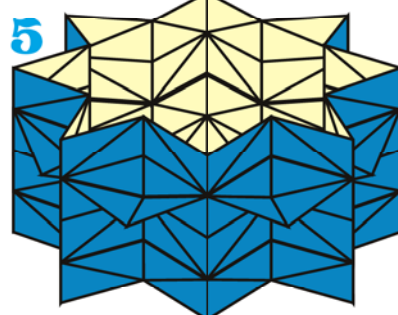
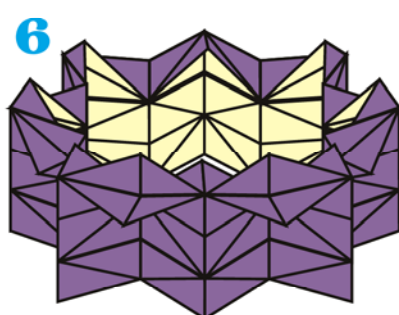
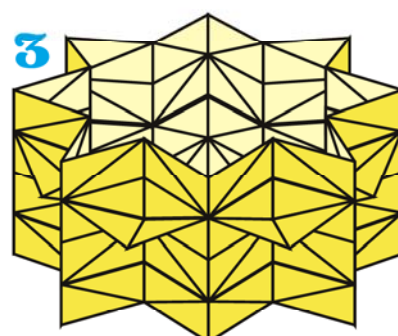
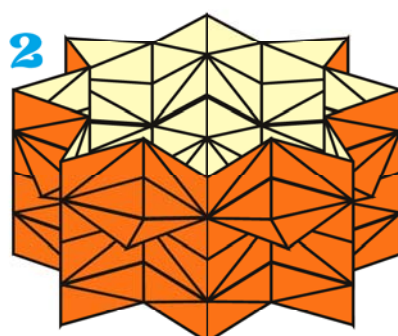
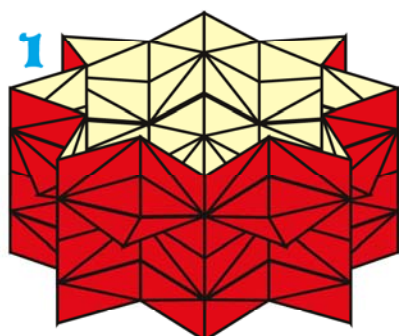
Here is the completed special last Ring-Module!



## 6 Ring-Modules For Rainbow Magic Star

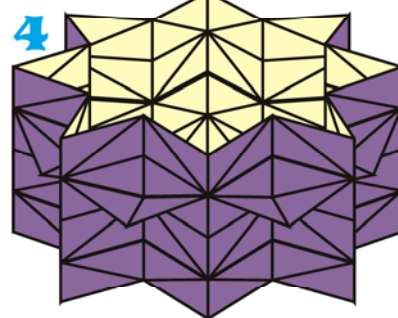
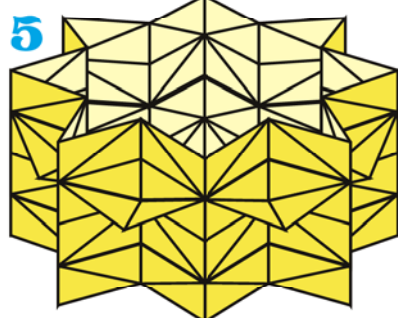
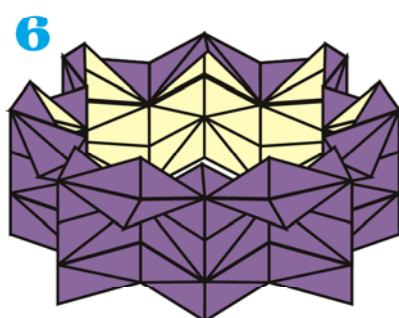
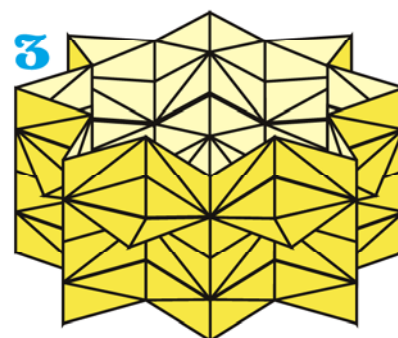
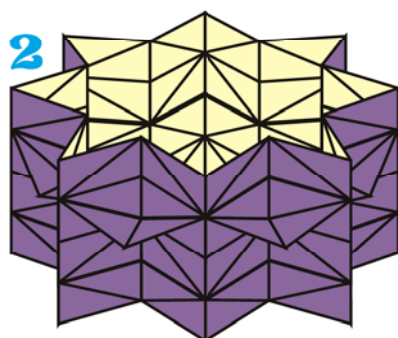
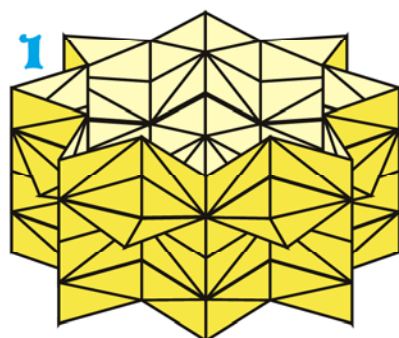
Now you should have all 6 Ring-Modules, including the special last Ring-Module, ready for the assembly.

Go to the article 'Multi-Piece Magic Star Assembly' and diligently follow to the instructions to assemble your 8-Point Magic Star!



## 6 Ring-Modules For Hypnotic Rings Magic Star

Don't forget that it's also possible to use just 2 complementary colours, for instance, yellow and violet. In this case you will need 3 rectangles of each colour.



**>>> jump to 'Multi-Piece Magic Star Assembly' article >>>**





# Magic Star (6 strips, 2:9)

by Yuri Shumakov

This multi-piece Magic Star has 8 points and consists of 6 ring-modules. Each ring-module is folded from a strip of paper, 2:9 in proportion, and connected into a ring with the overlapped method. The multi-piece Magic Star allows using the play of colours to create the mesmerizing effect when the star is rotated.

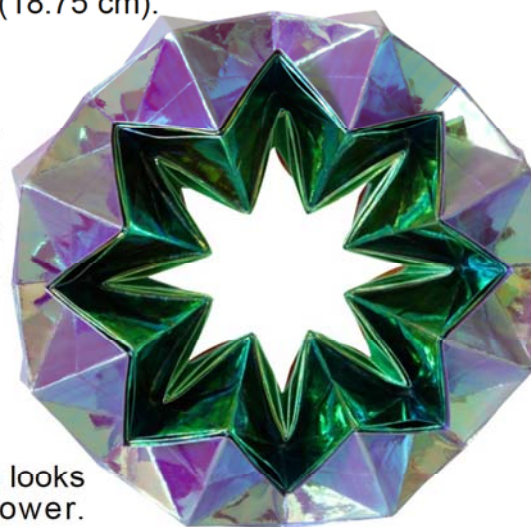
Suggested colours: 6 spectral colours of the rainbow work best for this design, namely: red, orange, yellow, green, blue, and violet. So you will need one rectangle per colour. It's also possible to use just 2 complementary colours like red and green, blue and orange, yellow and violet. In this case you will need 3 rectangles of each colour.

Suggested paper: colour copy paper, craft paper etc. Paper should be strong and flexible with tensile strength, as there will be a certain tension during the assembly of the star and during its further rotation. It can be one-colour paper, identical from both sides, as the back side of paper never appears on the star surface and therefore it doesn't matter what colour is on the back of paper.

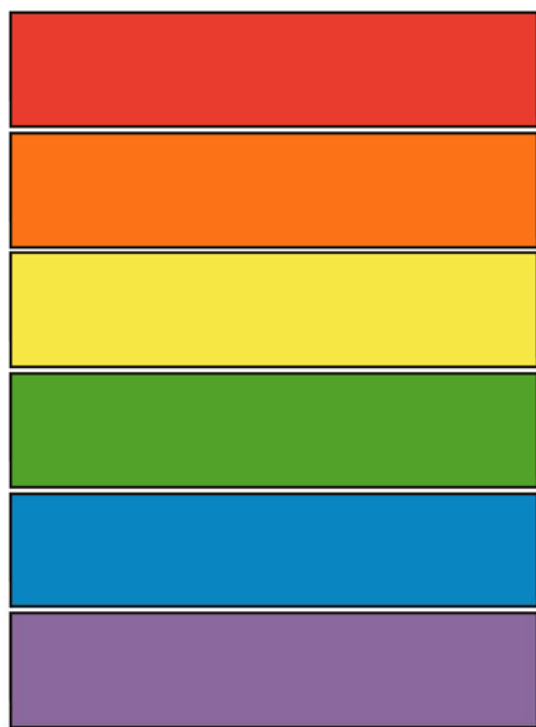


Suggested sizes: It's advisable to take large rectangles of paper to master the whole model, for instance 4 x 18 inches (10x45 cm) in size, in this case the diameter of the finished 8-point star will be measuring 5 inches (12.5 cm). Or you can start with even larger rectangle, say 6 x 27 (15x67.5 cm) inches in size with the diameter of the resulted 8-point star as 7 1/2 inches (18.75 cm).

The diameter of the finished 8-point star will be measuring about on 1/4 longer than the short side of the initial rectangle, as pictured.



Back side looks like a flower.



3D View.



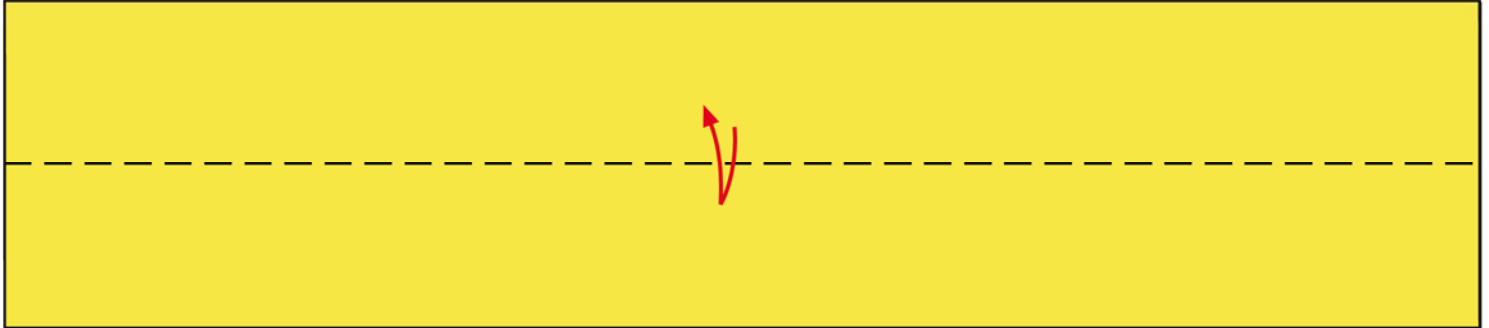
The Magic Star with 2 colours as "Hypnotic Rings".



## Ring-Module

If using two-color paper, begin with coloured side up.

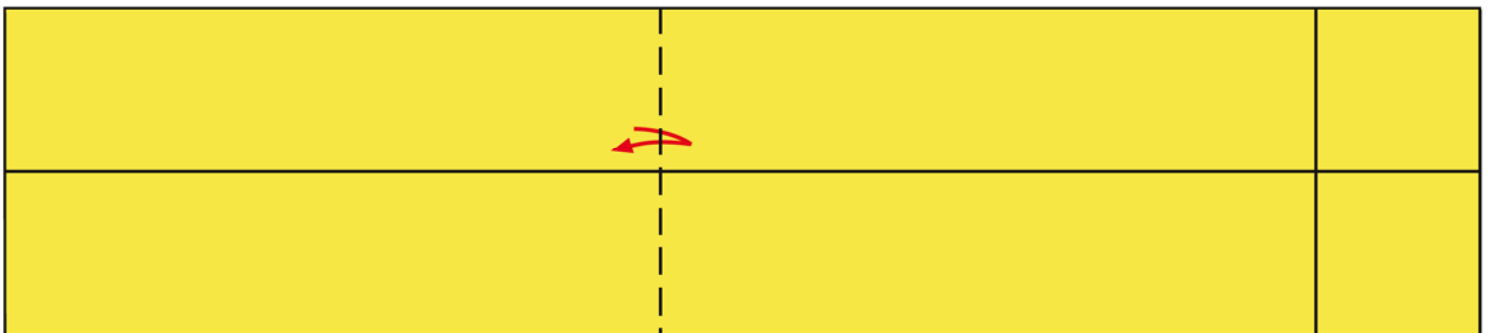
- 1 Place the rectangle lengthways. Valley fold bottom edge up, dividing the rectangle in half, as shown. Press the fold flat and unfold it.



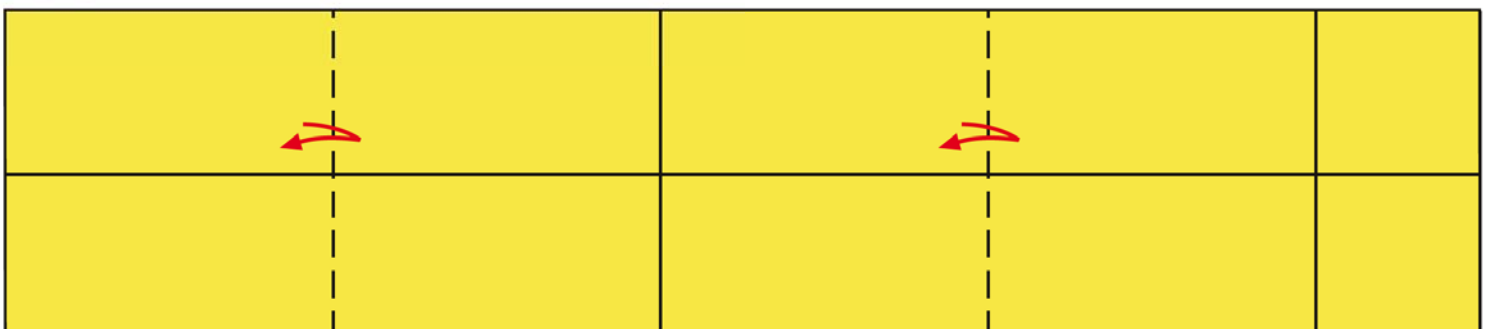
- 2 Valley fold the lower half of the right-hand edge over to meet the middle fold-line. Press the paper down on it just a little, thereby making the diagonal fold-mark. Then, valley fold and unfold the right-hand edge over the intersection of the bottom edge and the diagonal fold-mark, as shown.



- 3 Valley fold the big vertical section in half. Press the fold flat and unfold it.

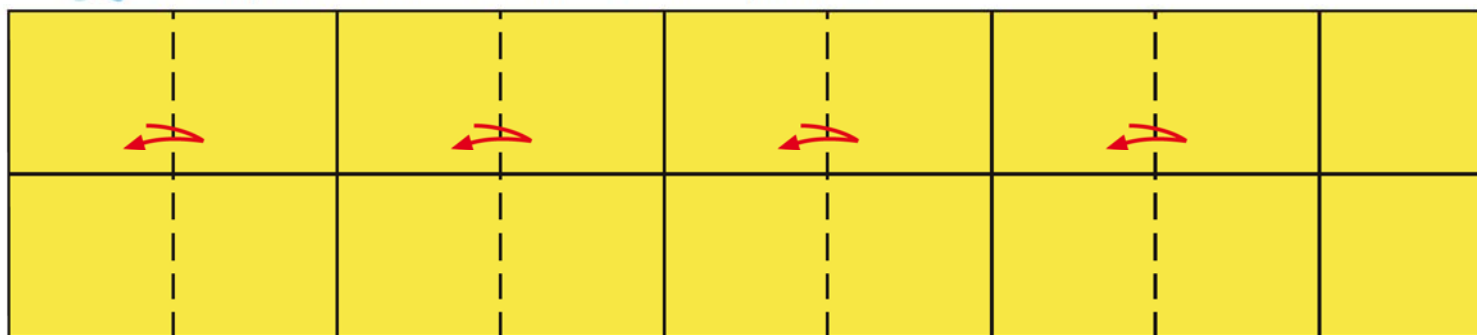


4



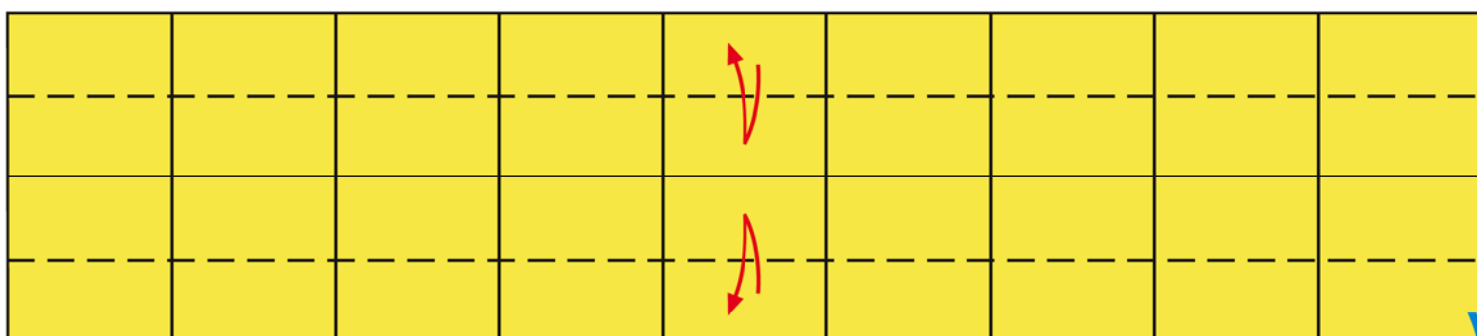
5

Now divide each of the 4 resulted vertical sections in half by valley folding, thereby the strip will be divided on the 9 vertical equal sections.



6

Valley fold and unfold each horizontal section in half, thereby dividing the rectangle in 4 equal horizontal sections. Then, turn the paper over.



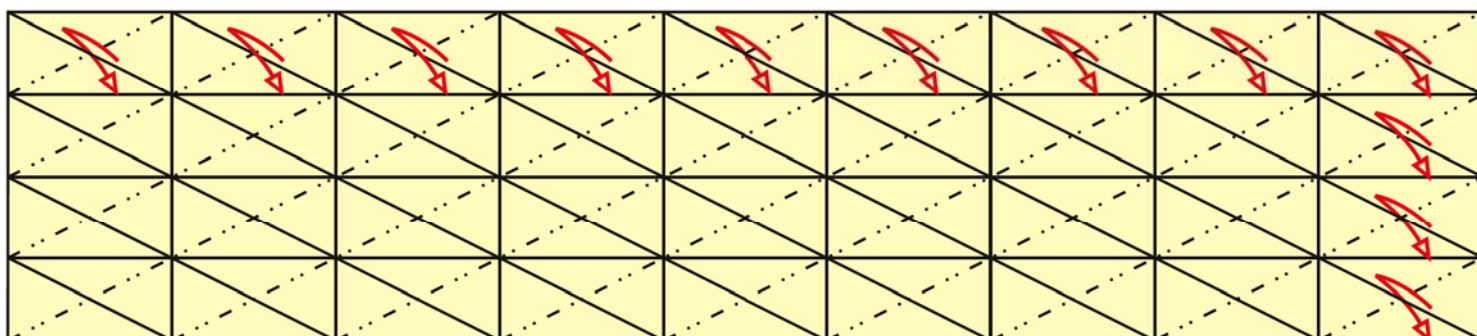
7

Working in one direction, make the diagonal fold-line over each rectangle by 'mountain' folding. It's comfortable to make these diagonals 'on hands' i.e. on each rectangle pinch the corners planning the diagonal and then make the 'mountain' fold between these points.



8

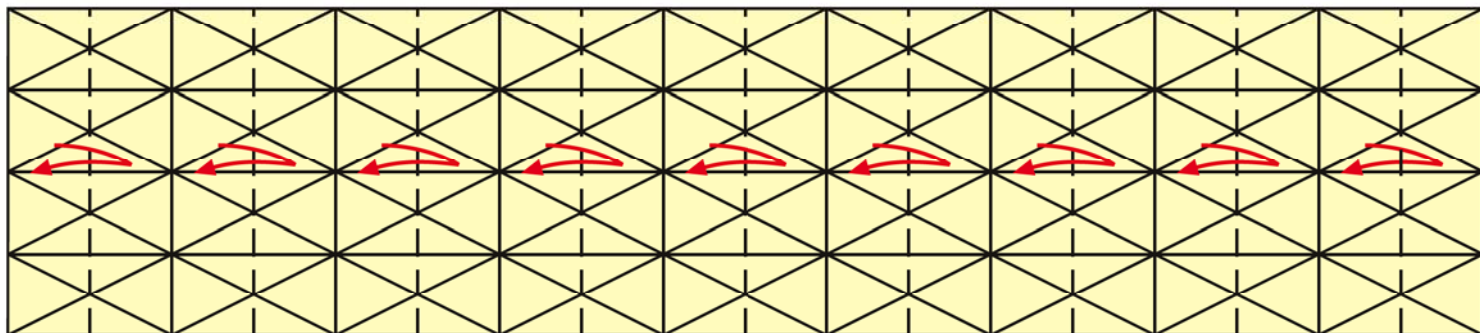
Now working in another direction, make the second diagonal fold-line over each rectangle, as shown.





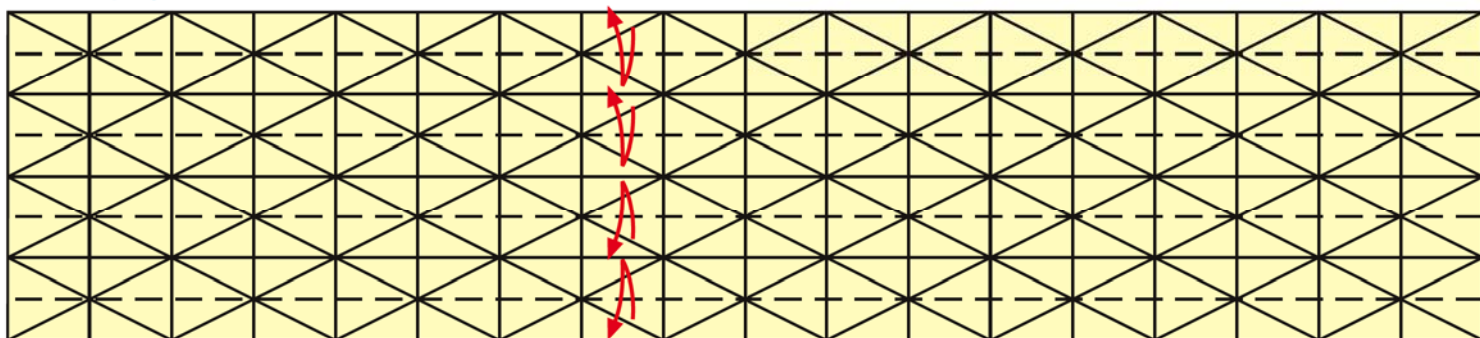
9

Valley fold and unfold each vertical section in half, thereby dividing the rectangle in 18 equal vertical sections.



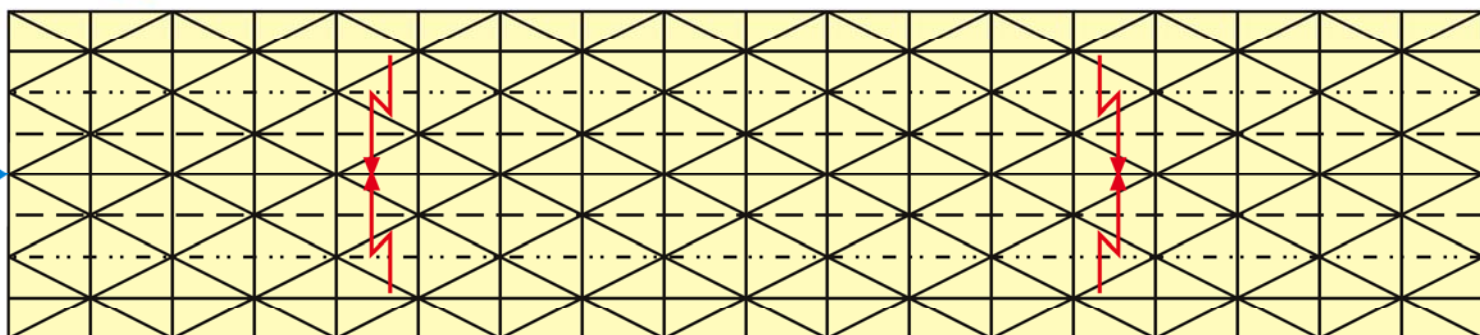
10

Valley fold and unfold each horizontal section in half, thereby dividing the rectangle in 8 equal horizontal sections.



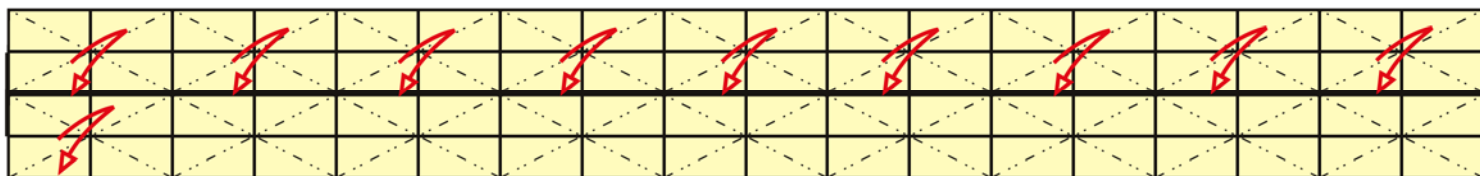
11

This should be the result. Double step fold the top and bottom parts of paper to the horizontal middle fold-line as shown.



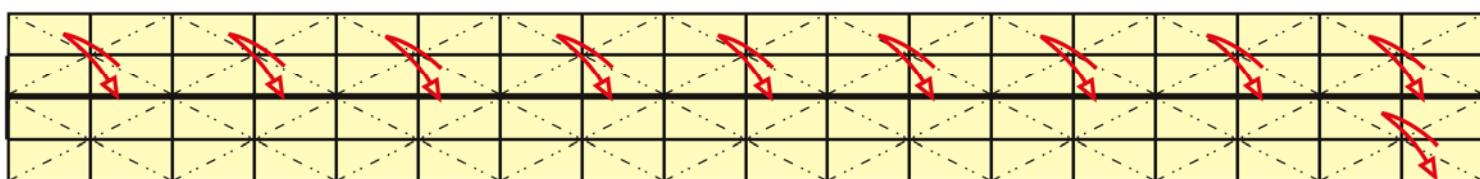
12

Working with all the layers, re-fold the 'mountain' folds in one direction.

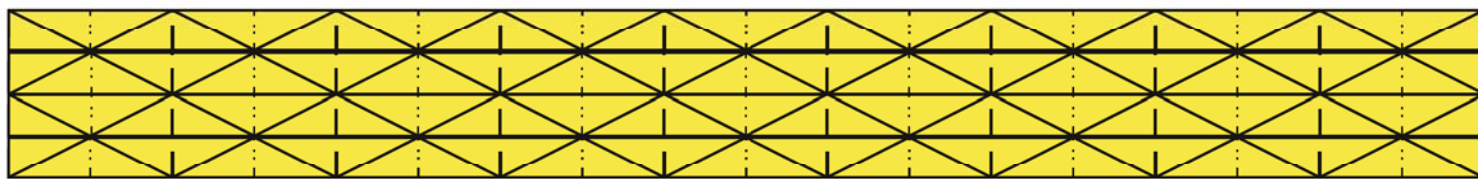


13

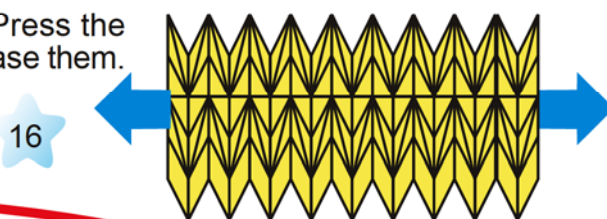
Continue working with all the layers and re-fold the 'mountain' folds in another direction. Then turn the paper over.



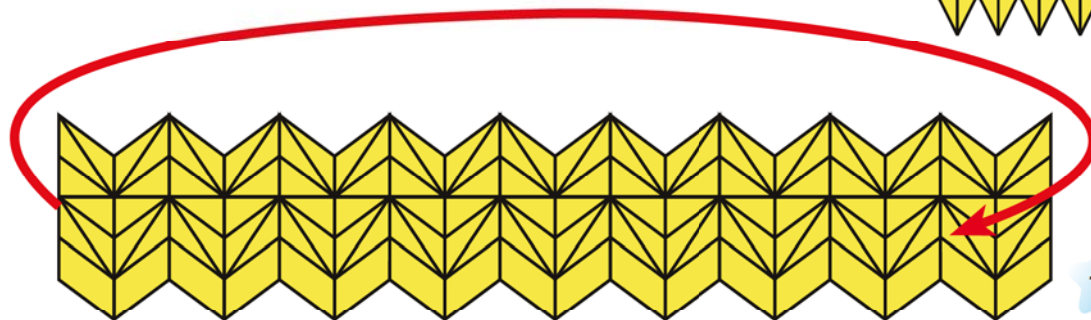
- 14 Along the existing vertical fold-lines, fold the strip by 'mountains' and 'valleys' like an accordion.



- 15 This should be the result. Press the folds together and then release them.

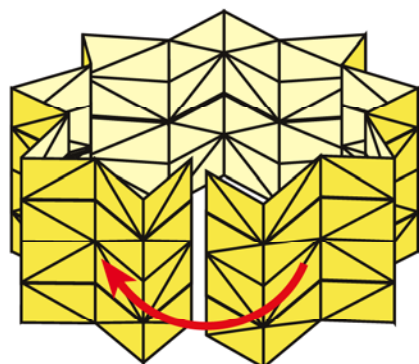


16



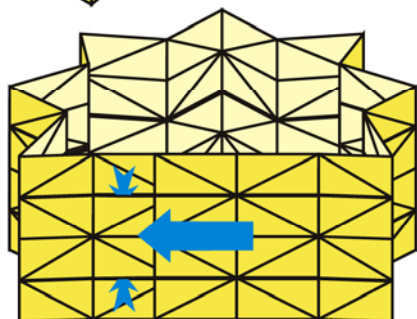
17

Now we need to connect the strip into a ring. Bring the left-hand side round to meet the right-hand side.



18

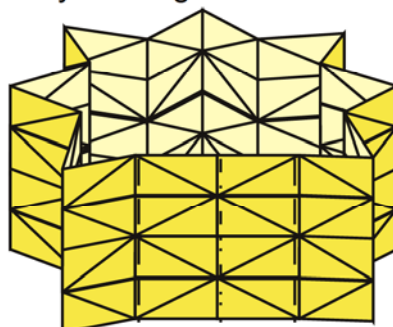
This should be the result. Now 2 sections will overlap the other 2 sections.



19

Inserting the layers of the right-hand end into the double step-folds of the left-hand end, slide the paper, so the 2 sections of the right-hand end completely cover the 2 sections of the left-hand end.

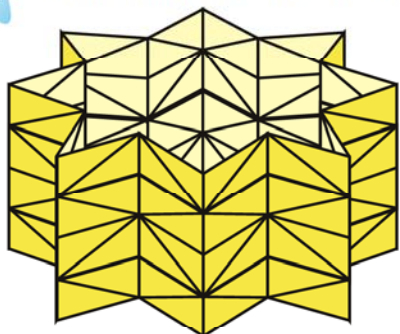
This should be the result. Now make 'valleys' and 'mountain' folds over the connected sections, thereby locking the connection.



20

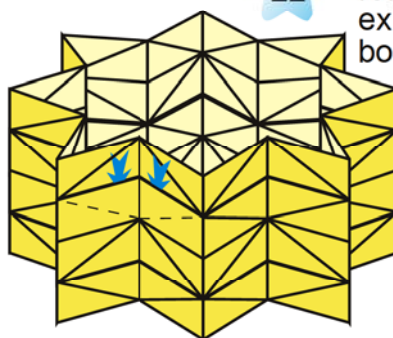


21 This should be the result.



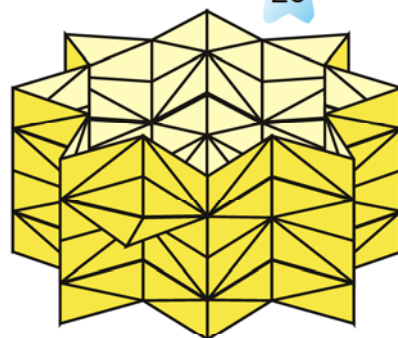
22

Working with one double section, separate the layers of the step-fold as shown and along the existing fold-lines valley fold the border into a cornice-like position.



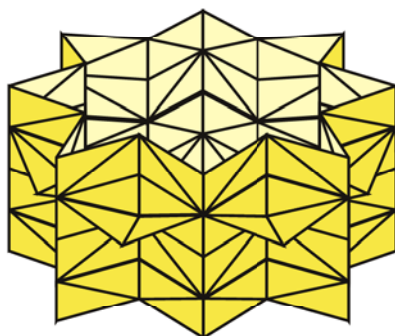
This should be the result. Repeat step 22 for each of the 7 remaining double sections.

23



24

Here is the completed Ring-Module for 8-Point Magic Star!

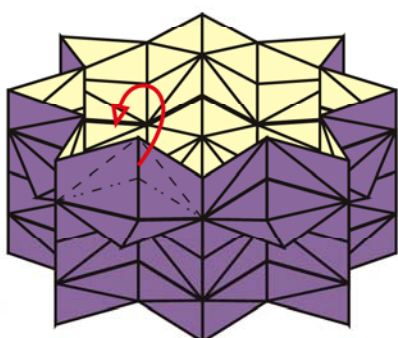


## The Last Ring-Module Is Special!

As you prepared all 6 Ring-Modules, take the last one you will use in the assembly as the final module and make additional folds on it as shown.

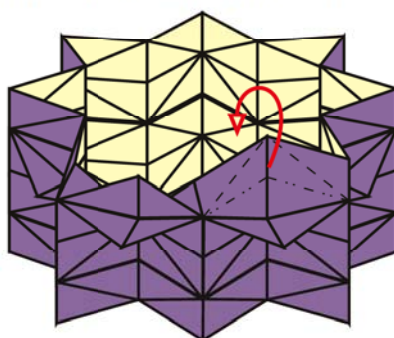
1

Working with the upper edge of the one double section, fold it along the existing fold-lines into a position shown in the next step.



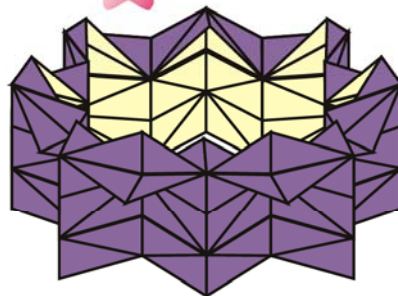
2

This should be the result. Now repeat with each upper edge of double sections, including the place where the layers overlap and pay attention to the folds so they go through both layers as if they are one.



3

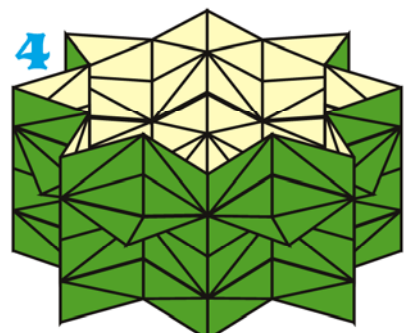
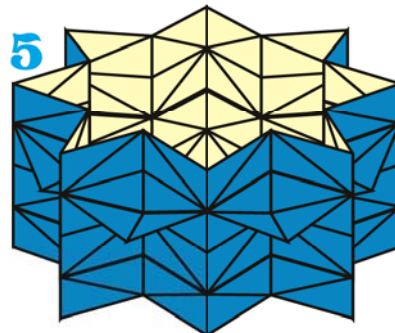
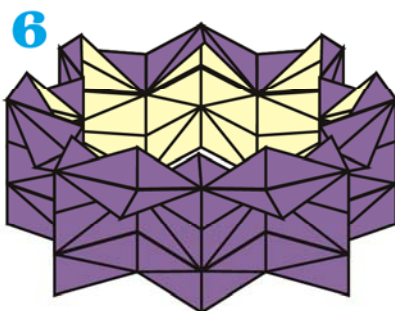
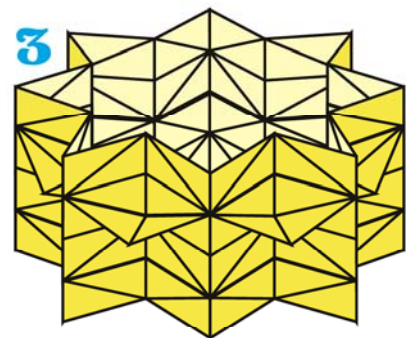
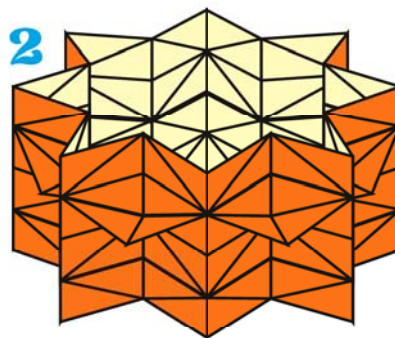
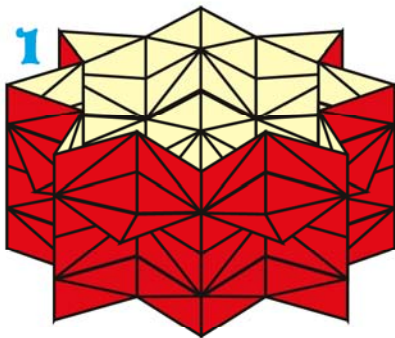
Here is the completed special last Ring-Module!



## 6 Ring-Modules

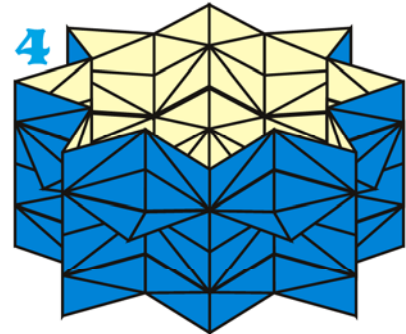
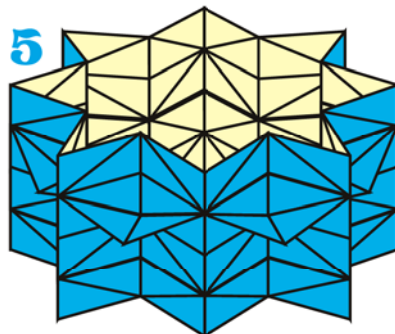
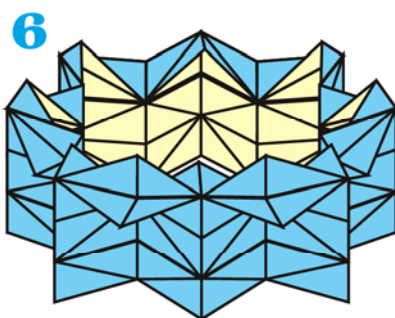
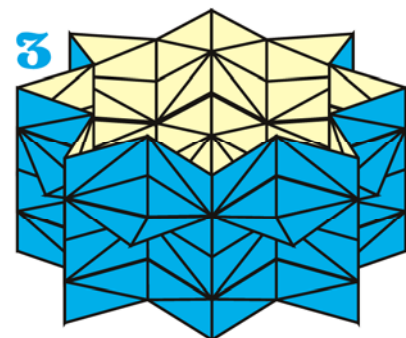
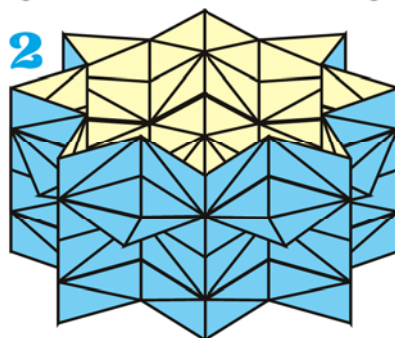
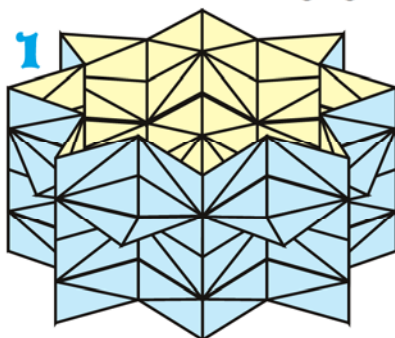
Now you should have all 6 Ring-Modules, including the special last Ring-Module, ready for the assembly.

Go to the article 'Multi-Piece Magic Star Assembly' and diligently follow to the instructions to assemble your 8-Point Magic Star!



It's also possible to use just 2 complementary colours like red and green, blue and orange, yellow and violet. In this case you will need 3 rectangles of each colour.

Or you may choose one colour and use the tints of it like pictured. So when the star rotates, the tints will be changing from light to dark and back to light.



**>>> jump to 'Multi-Piece Magic Star Assembly' article >>>**

Magic Star (6 strips, 2:9) © 1997 Yuri Shumakov - page 7



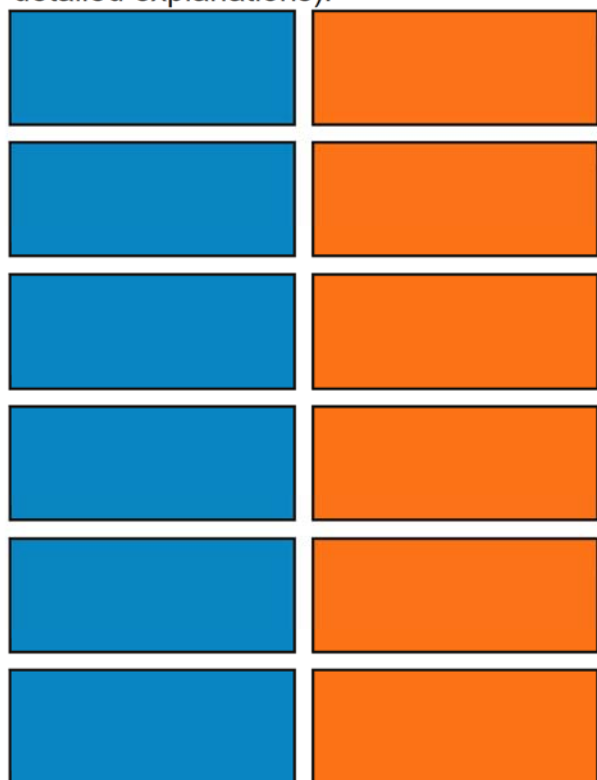


# Magic Star (12 strips, 2:5)

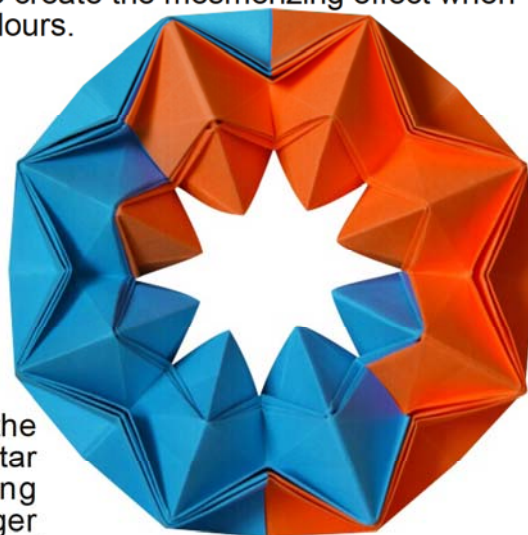
by Yuri Shumakov

This multi-piece Magic Star has 8 points and consists of 6 ring-modules. Each ring-module is folded from 2 strips of paper, each 2:5 in proportion, and connected into a ring with the overlapped method. The multi-piece Magic Star allows using the play of colours to create the mesmerizing effect when the star is rotated, including the "Yin-Yang" version with 2 colours.

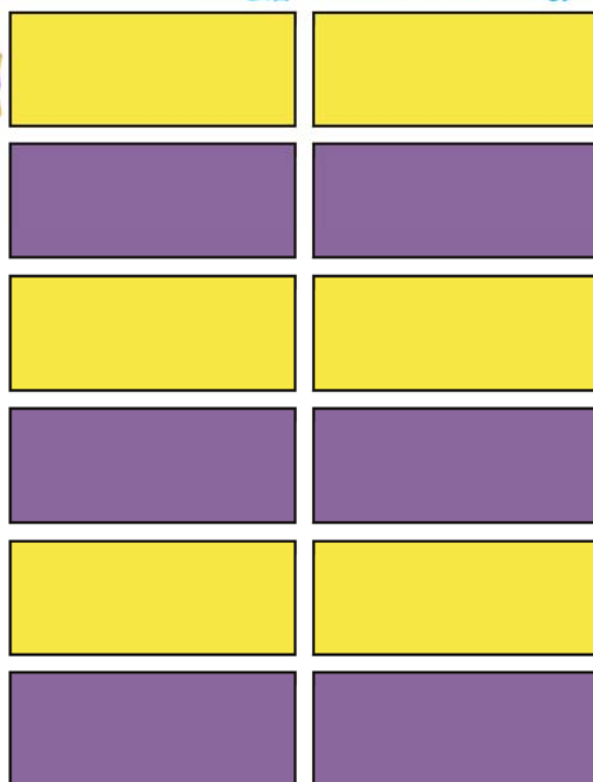
Suggested colours: It's possible to use 2 complementary colours like red and green, blue and orange, yellow and violet. In this case you will need 6 rectangles of each colour. 2 colours can be positioned as "Yin-Yang" version, where each ring consists of 2 colours (see the end of this article for detailed explanations).



The diameter of the finished 8-point star will be measuring about on 1/4 longer than the short side of the initial rectangle, as pictured.



## Hypnotic Rings



## Yin-Yang Magic Star



When the "Yin-Yang" Magic Star is rotated, the 2 interweaved parts are moving clockwise and back again.

The Magic Star with 2 complementary colours, positioned as "Hypnotic Rings".



## Rainbow Magic Star

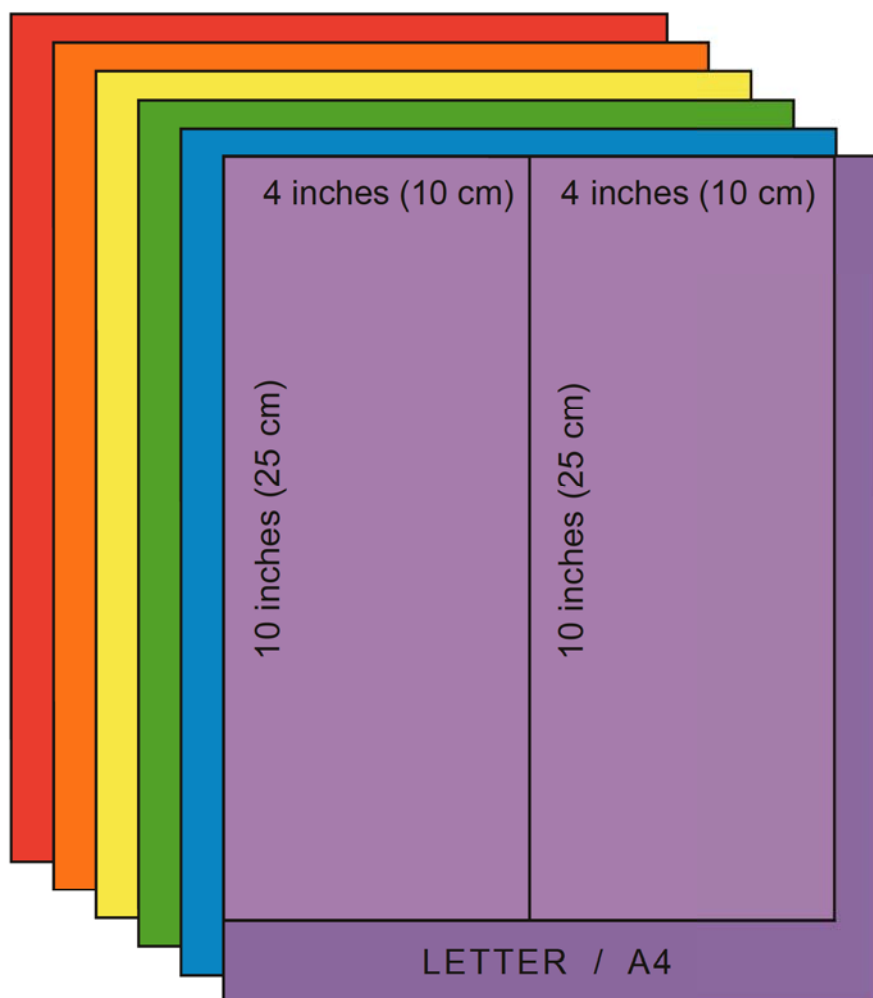
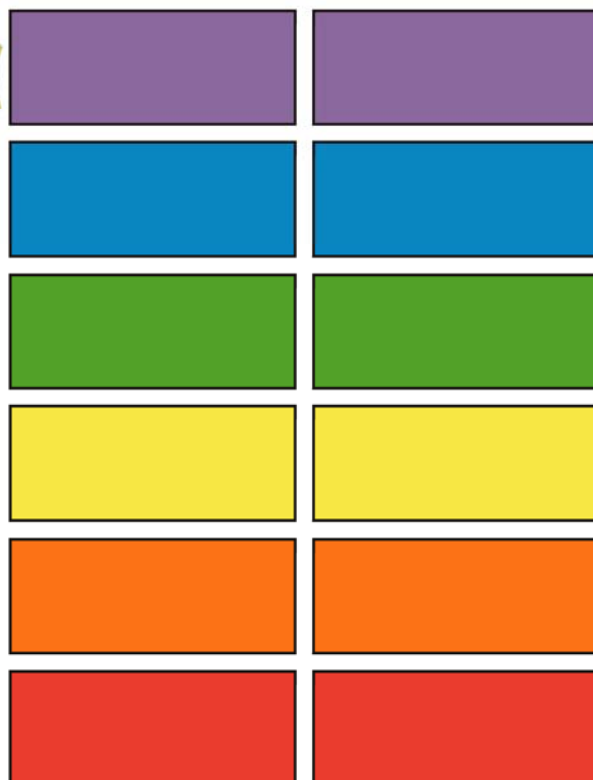
Also you may choose 6 spectral colours of the rainbow for this design, namely: red, orange, yellow, green, blue, and violet. So you will need 2 rectangles per colour.



Suggested paper: colour copy paper, craft paper etc. Paper should be strong and flexible with tensile strength, as there will be a certain tension during the assembly of the star and during its further rotation. It can be one-colour paper, identical from both sides, as the back side of paper never appears on the star surface and therefore it doesn't matter what colour is on the back of paper.

Suggested sizes: It's advisable to take large rectangles of paper to master the whole model, for instance 4 x 10 inches (10x25 cm) in size, in this case the diameter of the finished 8-point star will be measuring 5 inches (12.5 cm).

It's very convenient to make such rectangles from sheets of A4 (European format) or Letter (North American format) in size. In this case you will need just 6 sheets of A4 or Letter of appropriate colours to receive 12 rectangles.



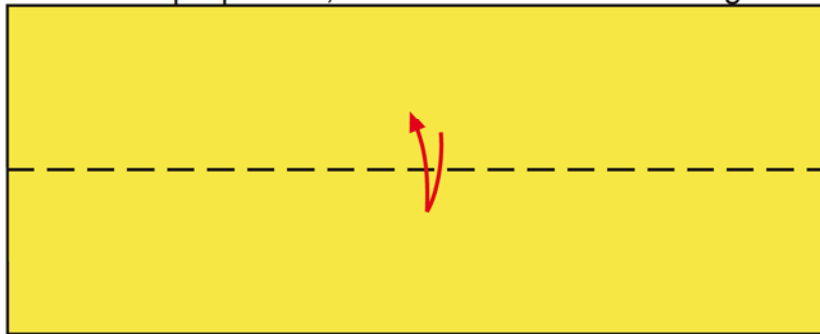
The Magic Star with 6 spectral rainbow colours.





## Strip Unit For Ring-Module

Each ring-module is folded from 2 rectangles of paper, each 2:5 in proportion, and connected into a ring with the overlapped method.



1

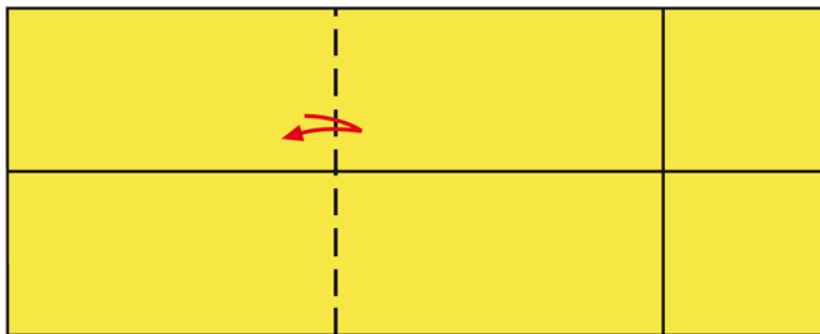
If using two-color paper, begin with coloured side up.

Place the rectangle lengthways. Valley fold bottom edge up, dividing the rectangle in half, as shown. Press the fold flat and unfold it.



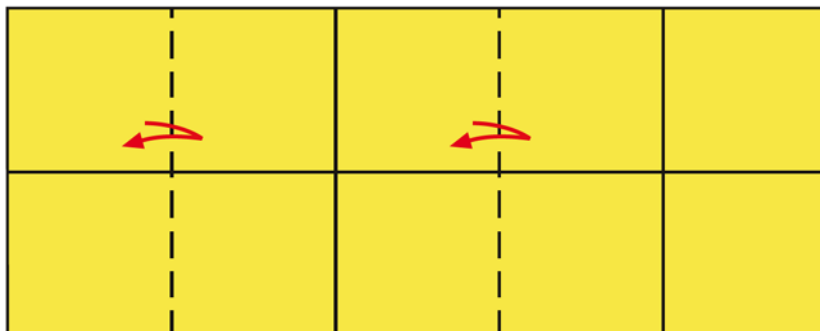
2

Valley fold the lower half of the right-hand edge over to meet the middle fold-line. Press the paper down on it just a little, thereby making the diagonal fold-mark. Then, valley fold and unfold the right-hand edge over the intersection of the bottom edge and the diagonal fold-mark, as shown.



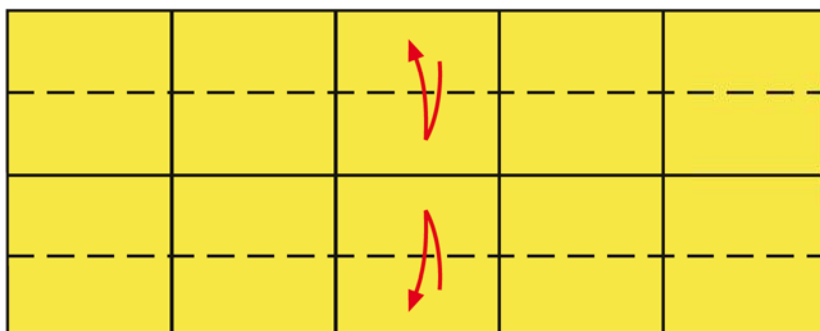
3

Valley fold the big vertical section in half. Press the fold flat and unfold it.



4

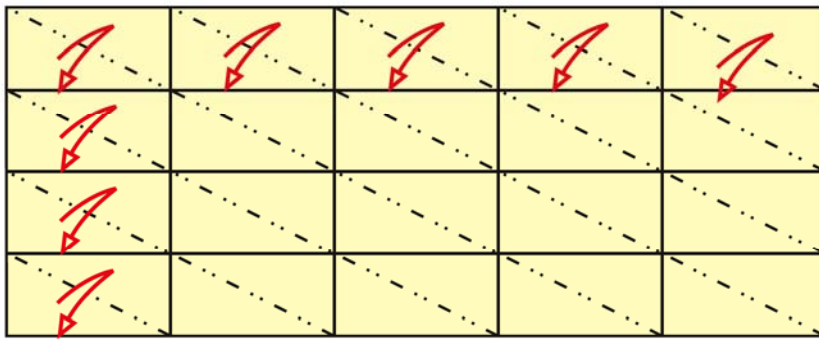
By valley folding, divide each of the 2 big vertical sections in half, thereby the rectangle will be divided on the 5 vertical equal sections.



5

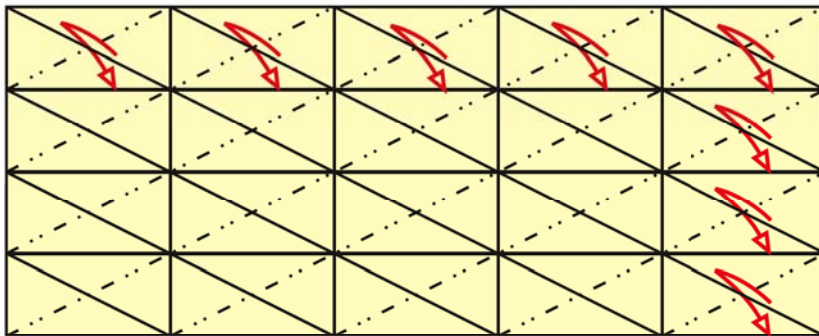
Valley fold and unfold each horizontal section in half, thereby dividing the rectangle in 4 equal horizontal sections. Then, turn the paper over.





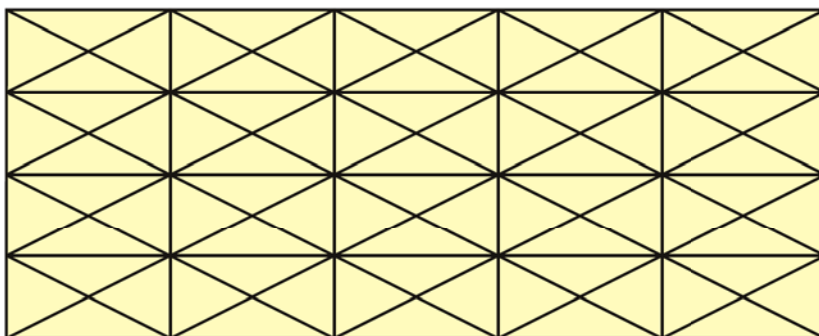
6

Working in one direction, make the diagonal fold-line over each rectangle by 'mountain' folding. It's comfortable to make these diagonals 'on hands' i.e. on each rectangle pinch the corners planning the diagonal and then make the 'mountain' fold between these points.



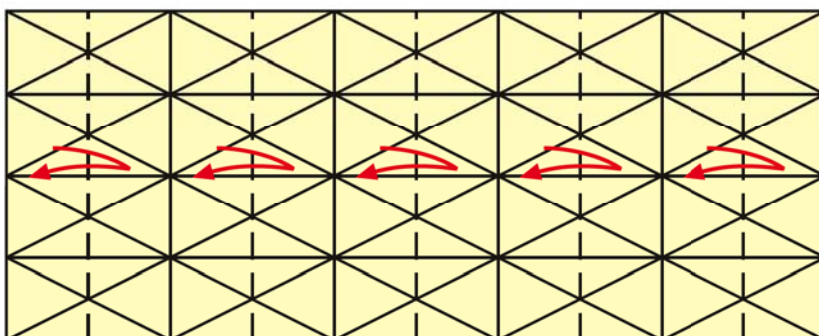
7

Now working in another direction, make the second diagonal fold-line over each rectangle, as shown.



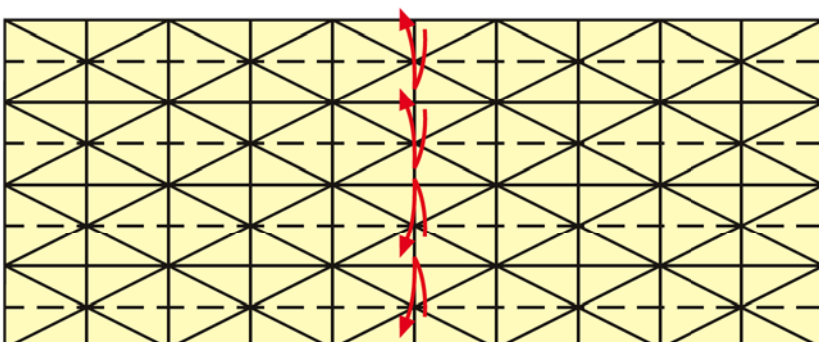
8

This should be the result.



9

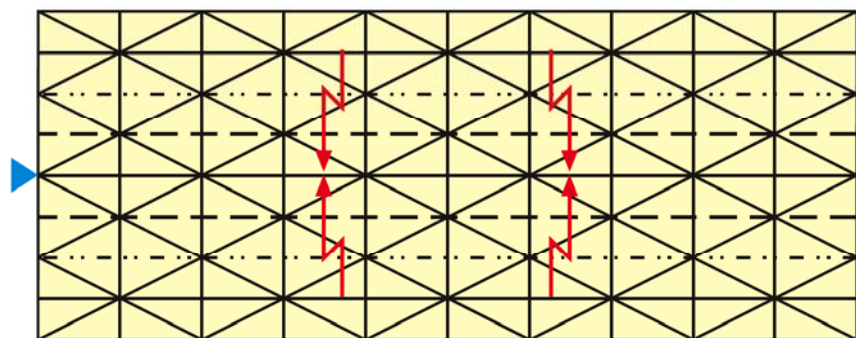
Valley fold and unfold each vertical section in half, thereby dividing the rectangle in 10 equal vertical sections.



10

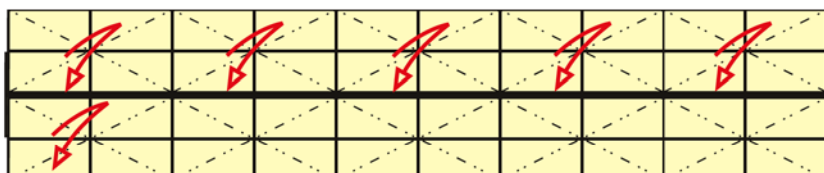
Valley fold and unfold each horizontal section in half, thereby dividing the rectangle in 8 equal horizontal sections.





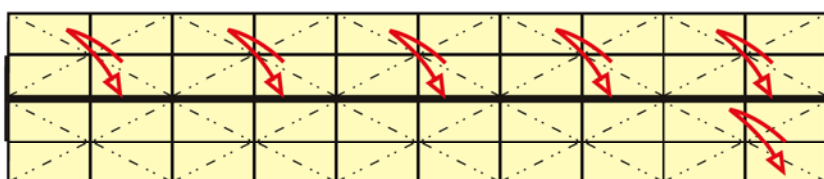
11

This should be the result. Double step fold the top and bottom parts of paper to the horizontal middle fold-line as shown.



12

Working with all the layers, re-fold the 'mountain' folds in one direction.



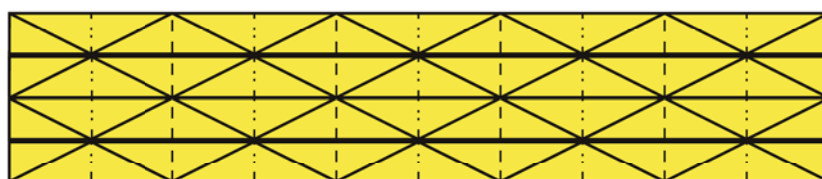
13

Continue working with all the layers and re-fold the 'mountain' folds in another direction. Then turn the paper over.



14

Along the existing vertical fold-lines, fold the strip by 'mountains' and 'valleys' like an accordion.



15

Here is the completed strip unit for the Ring-Module. Now fold another rectangle in the same way.

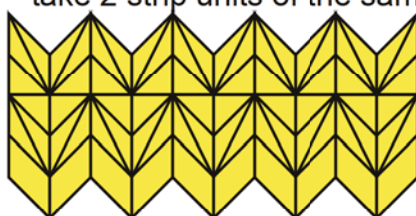
## Connecting 2 Strip Units Into Ring-Module

Each ring-module is folded from 2 strip units and connected into a ring with the overlapped method.

In case you make the Ring-Module, consisting of one colour, take 2 strip units of the same colour.

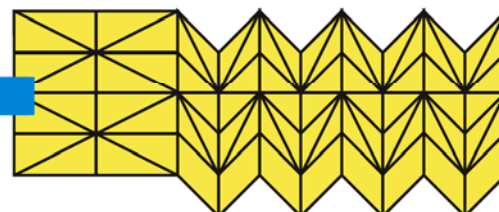
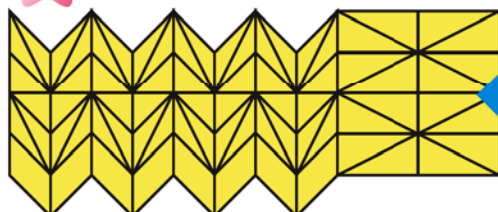
1

Take the 2 strip units. Stretch one double section on each pre-folded strip as shown in the next step.

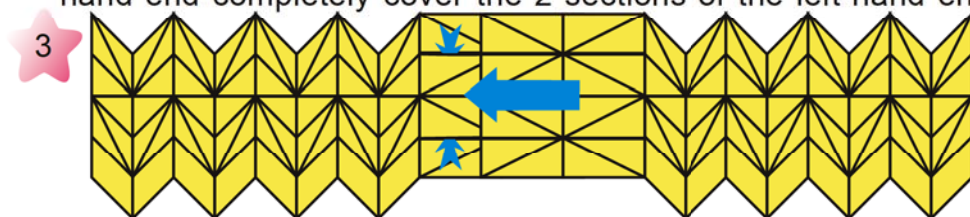


2

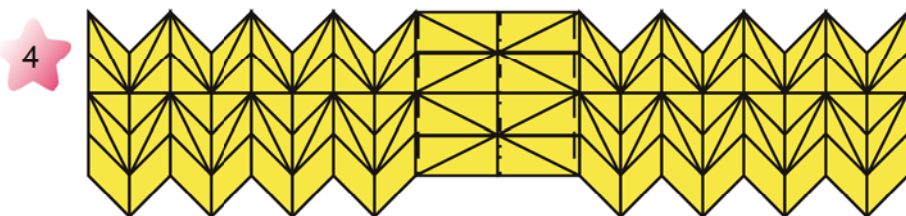
Now the 2 vertical sections of the right strip will go atop and overlap the 2 vertical sections of the left strip.



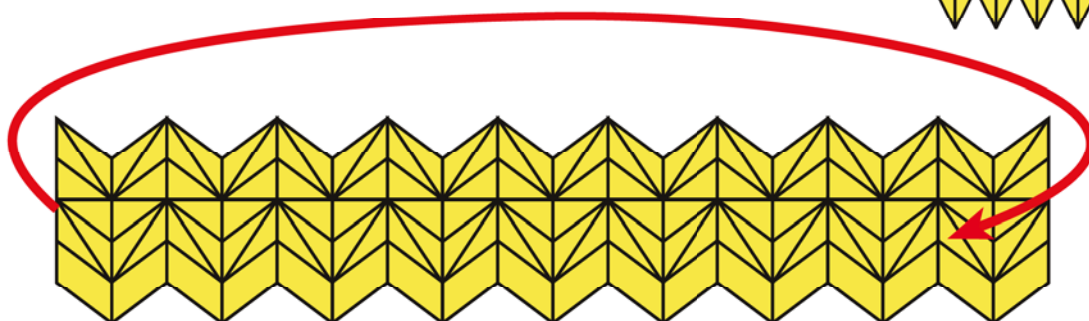
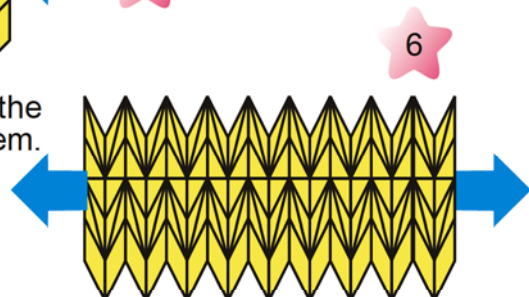
Inserting the layers of the right-hand end into the double step-folds of the left-hand end, slide the paper, so the 2 sections of the right-hand end completely cover the 2 sections of the left-hand end.



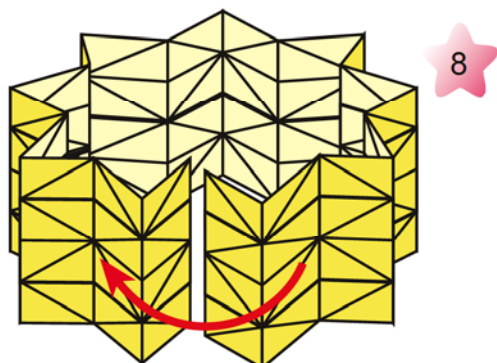
This should be the result. Now make 'valleys' and 'mountain' folds over the connected sections, thereby locking the connection.



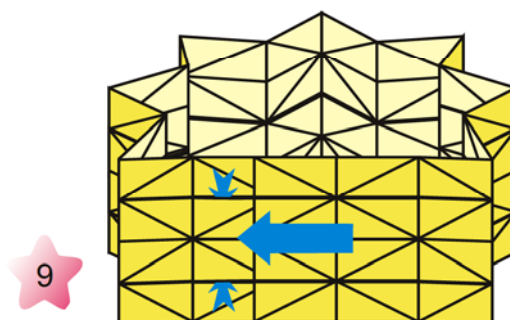
This should be the result. Press the folds together and then release them.



Now we need to connect the resulted strip into a ring. Bring the left-hand side round to meet the right-hand side.



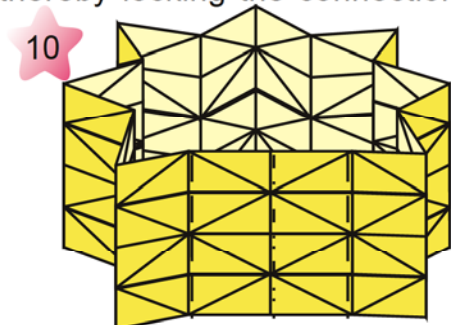
This should be the result. Now 2 sections will overlap the other 2 sections.



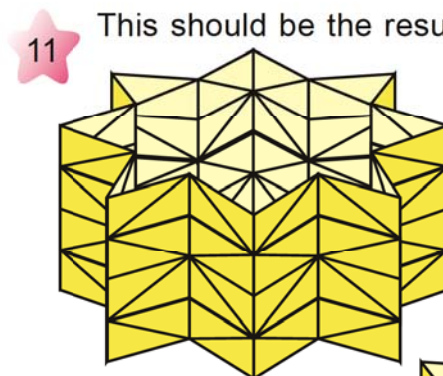
Inserting the layers of the right-hand end into the double step-folds of the left-hand end, slide the paper, so the 2 sections of the right-hand end completely cover the 2 sections of the left-hand end.



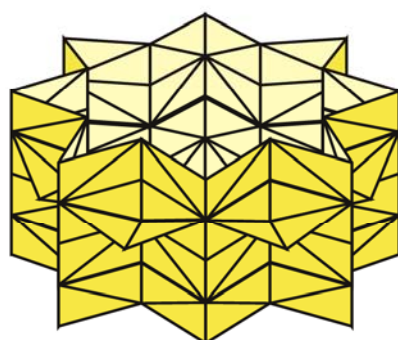
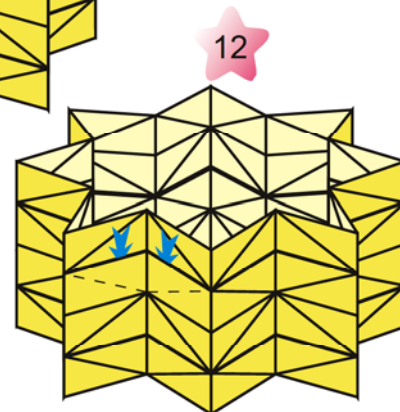
This should be the result. Now make 'valleys' and 'mountain' folds over the connected sections, thereby locking the connection.



This should be the result.

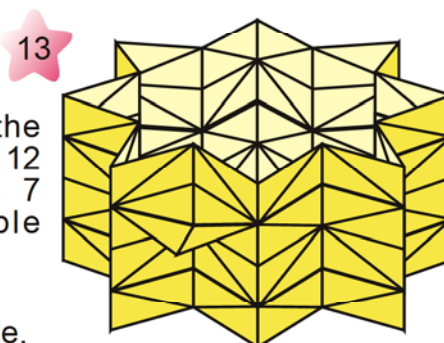


Working with one double section, separate the layers of the step-fold as shown and along the existing fold-lines valley fold the border into a cornice-like position.



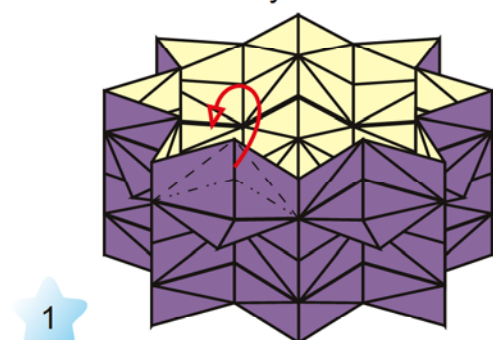
Here is the completed Ring-Module, made out of 2 strip units!

This should be the result. Repeat step 12 for each of the 7 remaining double sections.

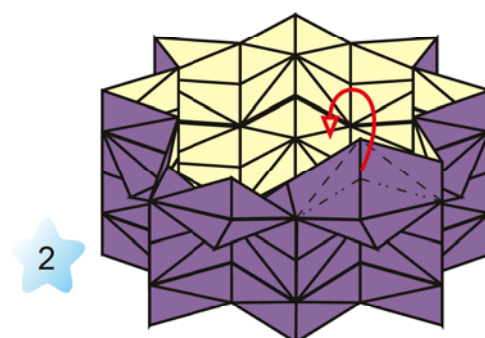


## The Last Ring-Module Is Special!

As you prepared all 6 Ring-Modules, take the last one you will use in the assembly as the final module and make additional folds on it as shown.

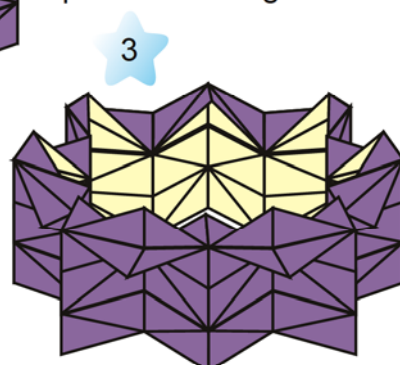


Working with the upper edge of the one double section, fold it along the existing fold-lines into a position shown in the next step.



This should be the result. Now repeat with each upper edge of double sections, including the place where the layers overlap and pay attention to the folds so they go through both layers as if they are one.

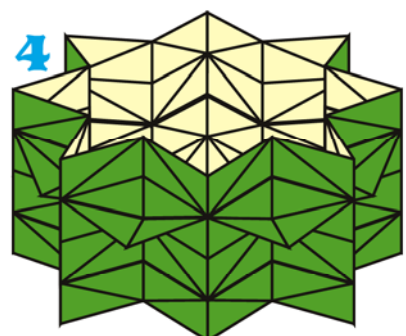
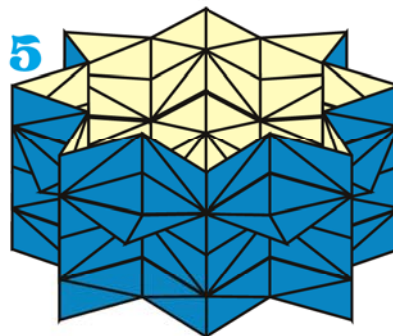
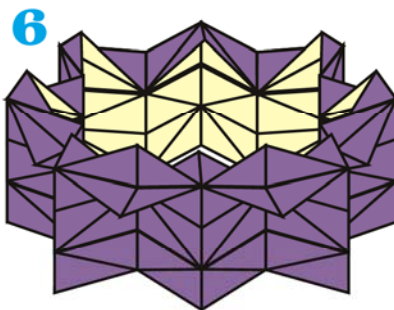
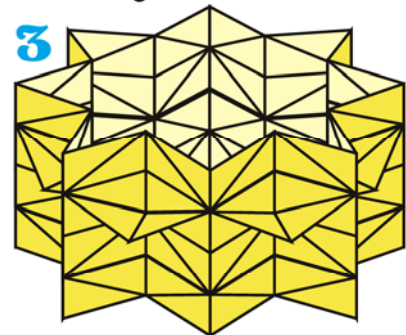
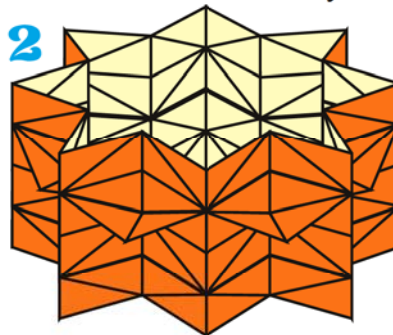
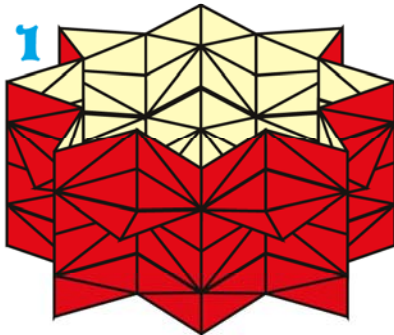
Here is the completed special last Ring-Module!



## 6 Ring-Modules

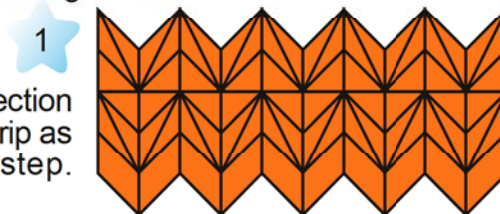
Now you should have all 6 Ring-Modules, including the special last Ring-Module, ready for the assembly.

Go to the article 'Multi-Piece Magic Star Assembly' and diligently follow to the instructions to assemble your 8-Point Magic Star!



>>> **jump to 'Multi-Piece Magic Star Assembly' article >>>**  
**Yin-Yang Version**

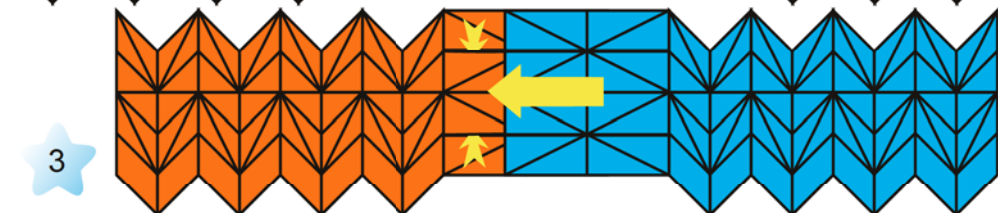
Each ring-module consists of 2 colours, hence take 2 strip units of 2 complementary colours, you have chosen for your Magic Star.



Stretch one double section on each pre-folded strip as shown in the next step.

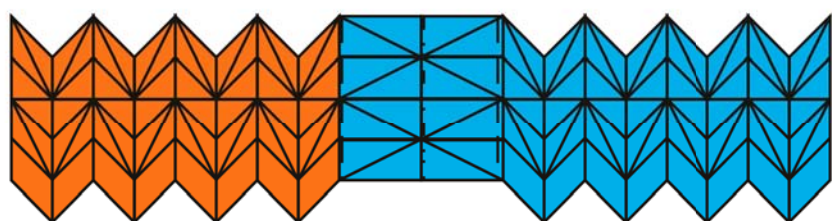


Now the 2 vertical sections of the right strip will go atop and overlap the 2 vertical sections of the left strip.



Inserting the layers of the right-hand end into the double step-folds of the left-hand end, slide the paper, so the 2 sections of the right-hand end completely cover the 2 sections of the left-hand end.



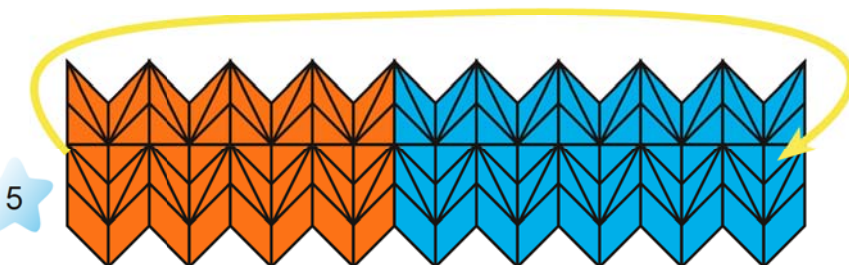


This should be the result. Now make 'valleys' and 'mountain' folds over the connected sections, thereby locking the connection.

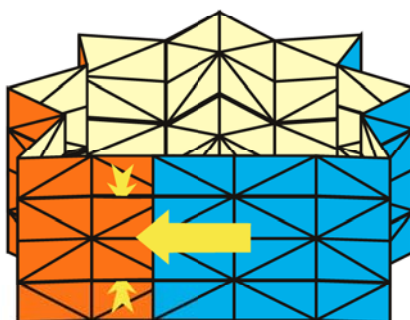
4



6 This should be the result. Now 2 sections will overlap the other 2 sections.

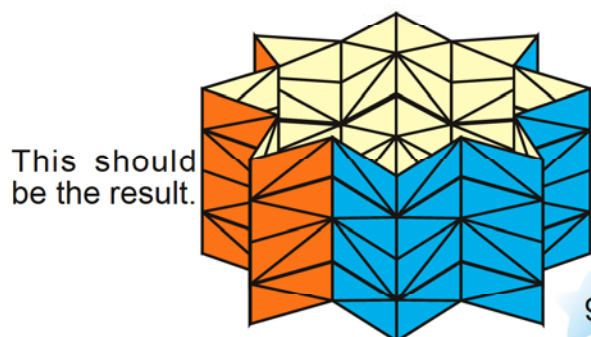


5 Now we need to connect the resulted strip into a ring. Bring the left-hand side round to meet the right-hand side.



7

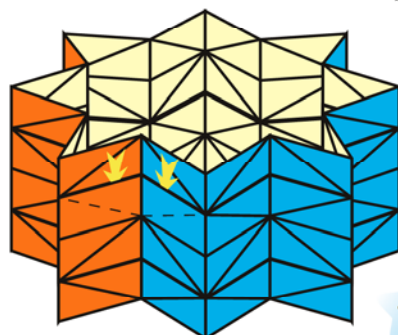
Inserting the layers of the right-hand end into the double step-folds of the left-hand end, slide the paper, so the 2 sections of the right-hand end completely cover the 2 sections of the left-hand end.



This should be the result.

9

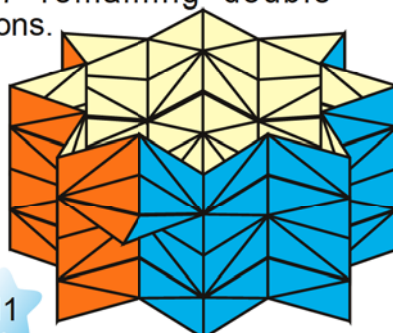
This should be the result. Now make 'valleys' and 'mountain' folds over the connected sections, thereby locking the connection.



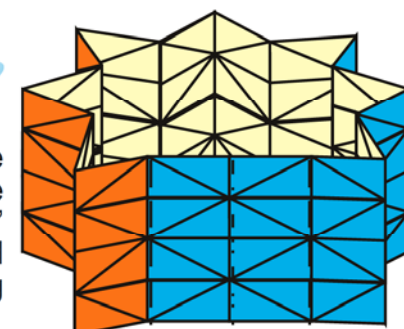
10

Working with one double section, separate the layers of the step-fold as shown and along the existing fold-lines valley fold the border into a cornice-like position.

This should be the result. Repeat step 10 for each of the 7 remaining double sections.



11



8

Here is the completed Ring-Module, made out of 2 strip units of 2 colours!

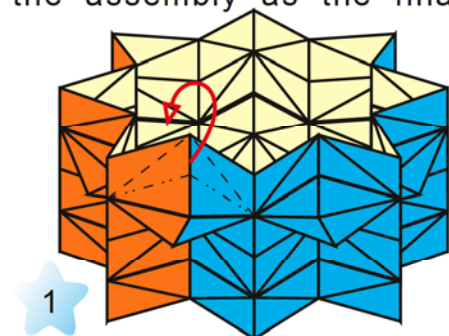


12

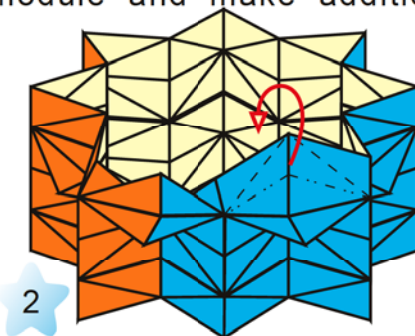


## The Last Ring-Module Is Special!

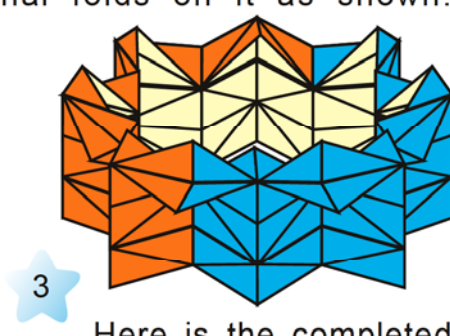
As you prepared all 6 Ring-Modules for the Yin-Yang Magic Star, take the last one you will use in the assembly as the final module and make additional folds on it as shown.



Working with the upper edge of the one double section, fold it along the existing fold-lines into a position shown in the next step.



This should be the result. Now repeat with each upper edge of double sections, including the place where the layers overlap and pay attention to the folds so they go through both layers as if they are one.

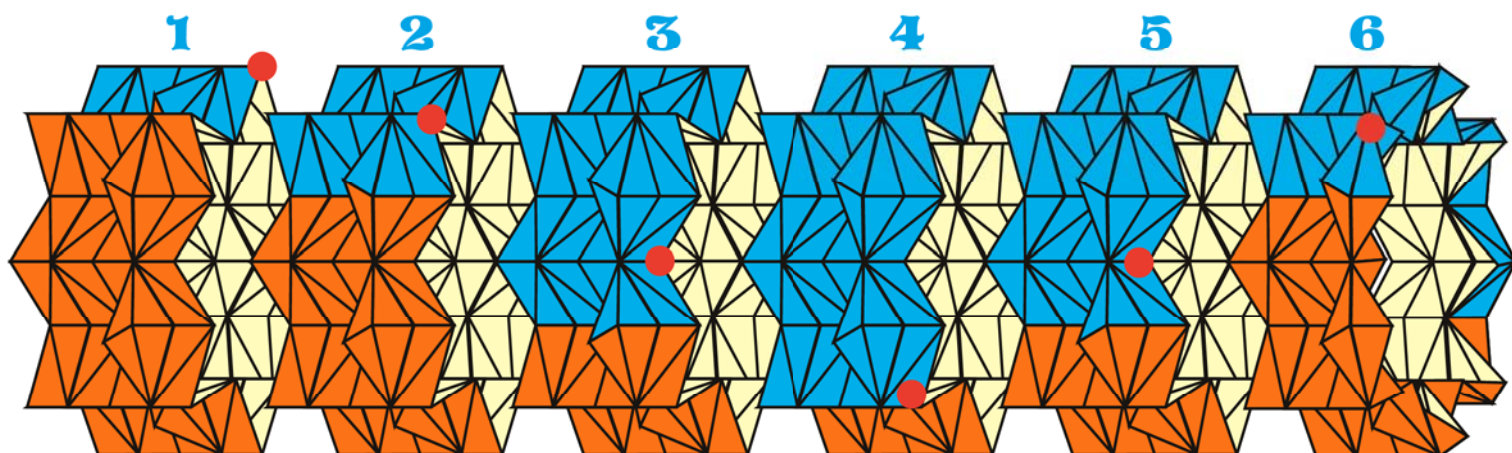


Here is the completed special last Ring-Module!

## 6 Ring-Modules For Yin-Yang Magic Star

6 Ring-Modules, including the special last Ring-Module for the Yin-Yang Magic Star are ready.

The assembly is the same as for any Multi-Piece Magic Star as shown in the article 'Multi-Piece Magic Star Assembly', but to receive the effect of interweaved colours of the Yin-Yang Magic Star, you have to follow the sequence of the colour shift of each next Ring-Module as shown.



The 4 first Ring-Modules are shifted by one point in the same direction (say, counterclockwise) and the 2 last ones are shifted by one point in the reverse direction.



**>>> jump to 'Multi-Piece Magic Star Assembly' article >>>**





# Magic Star (48 squares)

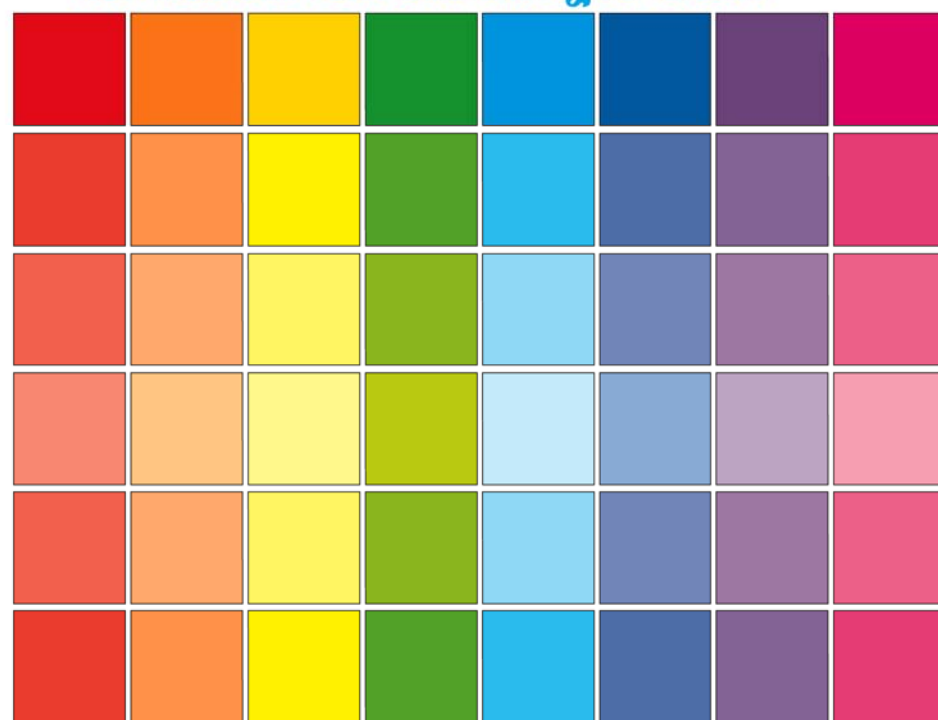
by Yuri and Katrin Shumakov

This multi-piece Magic Star has 8 points and consists of 6 ring-modules. Each ring-module is folded from 8 squares of paper, and connected into a ring with the overlapped method. This multi-piece Magic Star allows using the play of colours quite flexibly to create the mesmerizing effect when the star is rotated, including the "Chess" version with 2 colours and the "Rainbow Circle" with as much as 48 colours!

Suggested colours: For the "Rainbow Circle" version, pick 8 main rainbow-like colours: red, orange, yellow, green, blue, deep blue, violet and hot pink - they will form the one Ring-Module. And then for next 5 Ring-Modules, use tints of these 8 main rainbow-like colours as pictured below.

Suggested paper: origami paper, colour copy paper, chiyogami paper etc. Paper should be strong and flexible with tensile strength, as there will be a certain tension during the assembly of the star and during its further rotation.

## Rainbow Circle Magic Star



The diameter of the finished 8-point star will be measuring about on 1/4 longer than the side of the initial square, as pictured.

Suggested sizes: It's advisable to take large squares of paper to master the whole model, for instance 6-inch (15 cm) squares, in this case the diameter of the finished 8-point star will be measuring about 7 1/2 inches (18 cm).

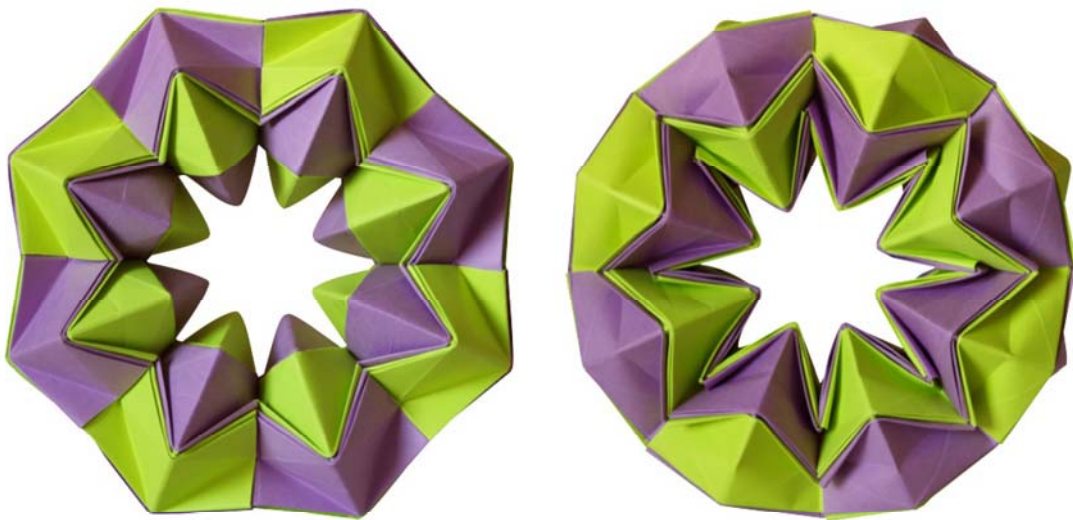


3D View.

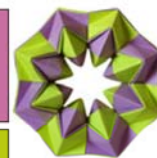
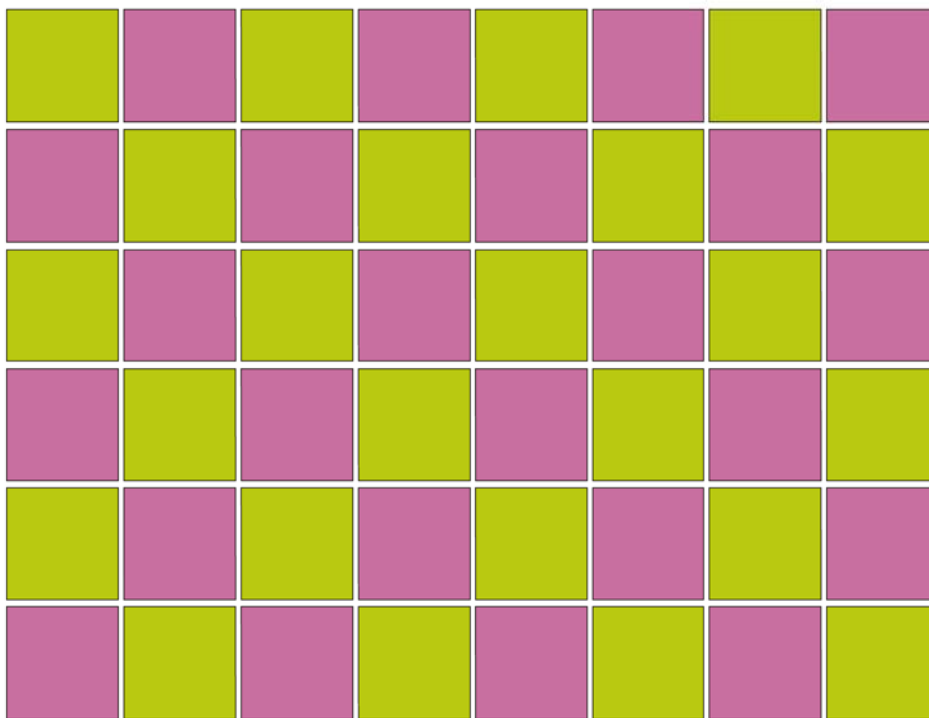


Back side looks like a flower.

## Chess Magic Star

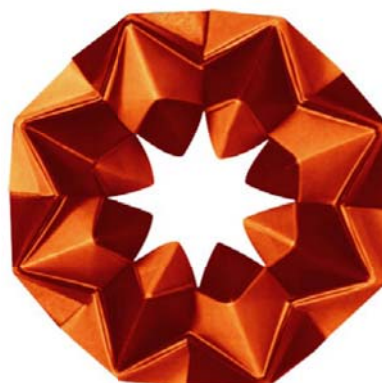


For the "Chess" version use 2 complementary colours like red and green, blue and orange, yellow and violet etc. In this case you will need 24 squares of each colour.



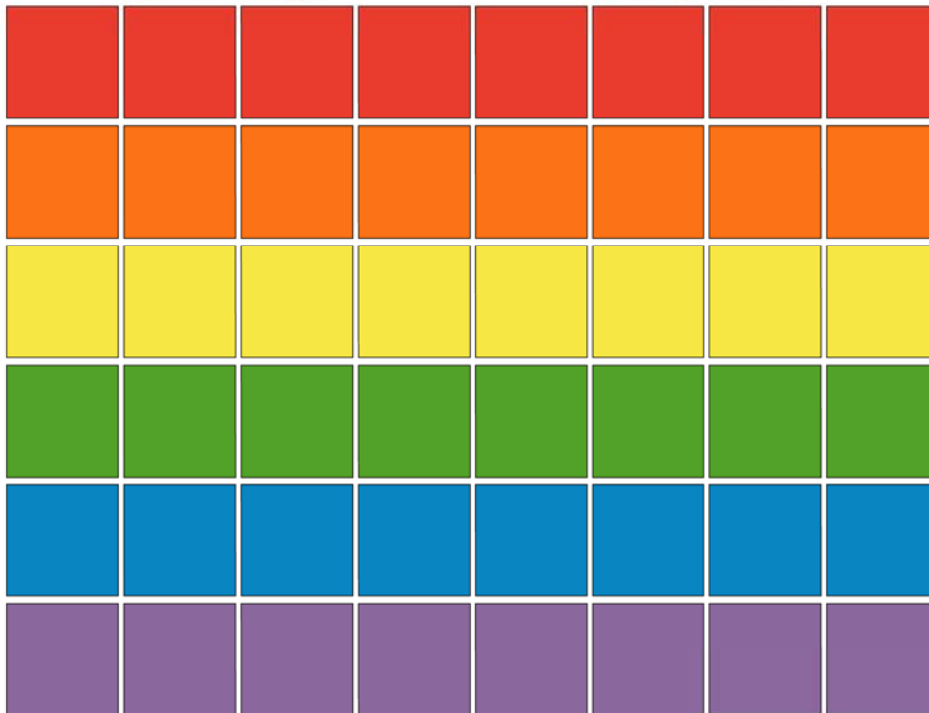
The diameter of the finished 8-point star will be measuring about on 1/4 longer than the side of the initial square, as pictured.

When you mastered the assembly of the Magic Star, you may try smaller squares, for instance, 3-inch (7.5 cm) squares of classic origami paper, in this case the diameter of the finished star will be measuring about 4 inches (10 cm).





## Rainbow Magic Star



You may also use 6 spectral colours of rainbow: red, orange, yellow, green, blue, and violet. So you will need 8 squares per colour.

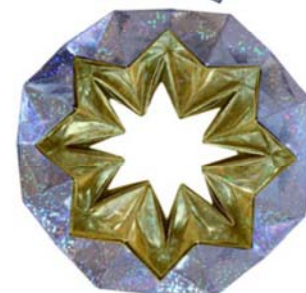
The diameter of the finished 8-point star will be measuring about on 1/4 longer than the side of the initial square, as pictured.



## Various Colour Combinations

This multi-piece Magic Star allows using the play of colours quite flexibly to create the mesmerizing effect when the star is rotated. There can be as much as 48 colours involved!

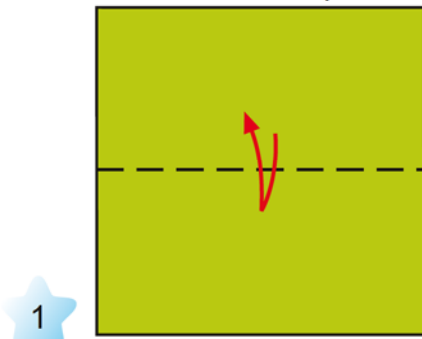
You may reproduce all the colour combinations presented before and create the new ones.



## Unit For Ring-Module

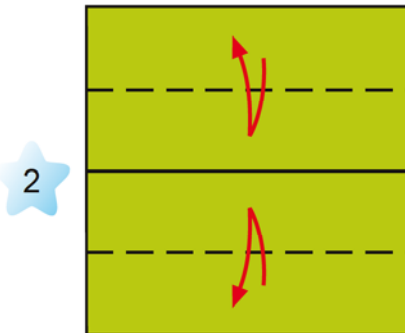
Each ring-module is folded from 8 squares of paper. Fold each square into a simple unit and then 8 units will be connected into a ring with the overlapped method.

If using two-color paper, begin with coloured side up.



1

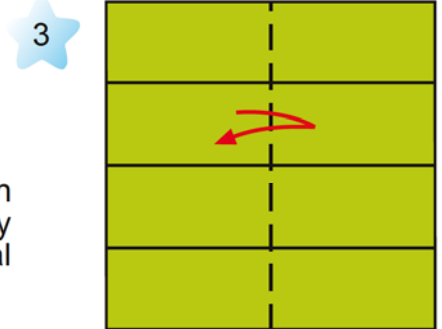
Valley fold the square in half from bottom to top. Press the fold flat and unfold it.



2

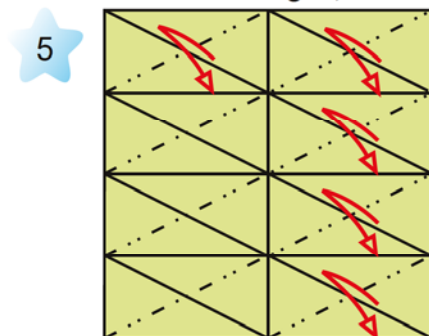
Valley fold and unfold each horizontal section in half, thereby dividing the square into 4 equal horizontal sections.

Valley fold and unfold the square in half from side to side, thereby dividing the square into 2 vertical sections. Then, turn the paper over.

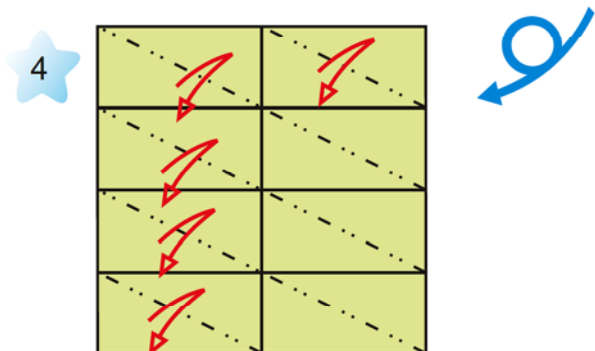


3

Now working in another direction, make the second diagonal fold-line over each rectangle, as shown.



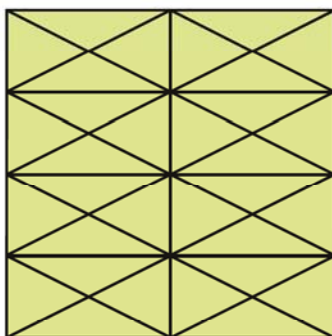
5



4

Working in one direction, make the diagonal fold-line over each rectangle by 'mountain' folding. It's comfortable to make these diagonals 'on hands' i.e. on each rectangle pinch the corners planning the diagonal and then make the 'mountain' fold between these points.

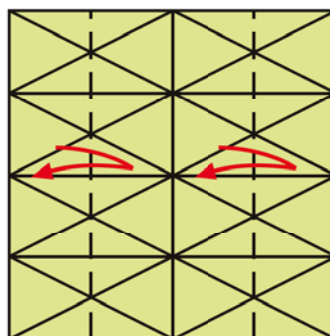
6



This should be the result.

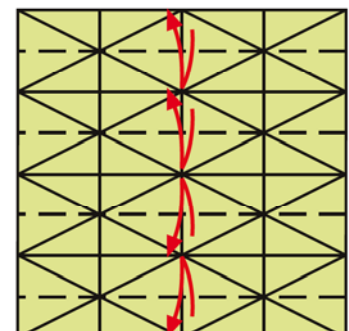
7

Valley fold and unfold each vertical section in half, thereby dividing the square into 4 equal vertical sections.



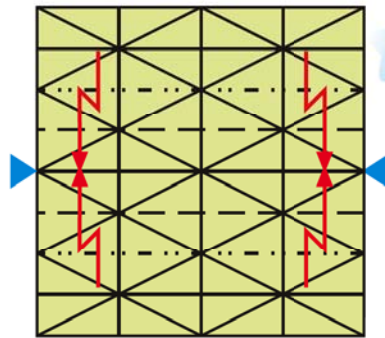
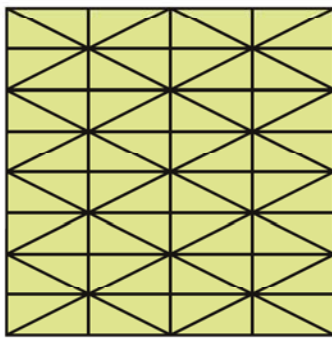
8

Valley fold and unfold each horizontal section in half, thereby dividing the square in 8 equal horizontal sections.

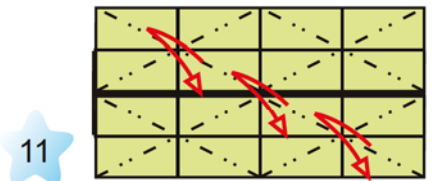




9 This should be the result.



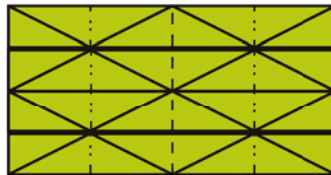
10 Double step fold the top and bottom parts of paper to the horizontal middle fold-line as shown.



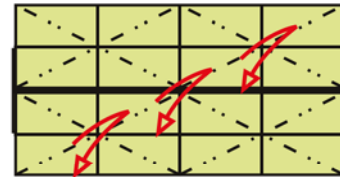
11 Working with all the layers, re-fold the 'mountain' folds in one direction.

Along the existing vertical fold-lines, fold the strip by 'mountains' and 'valley' like an accordion.

13



12



12 Continue working with all the layers and re-fold the 'mountain' folds in another direction. Then turn the paper over.



14

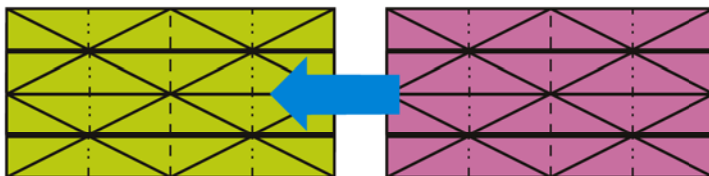
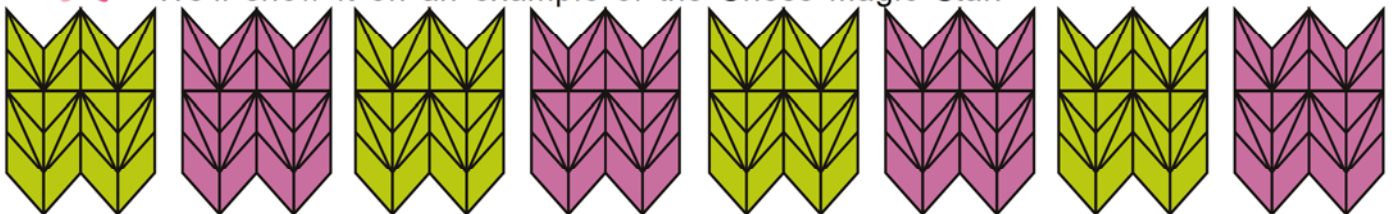
Here is the completed unit for the Ring-Module.

## Connecting 8 Units Into Ring-Module

Each ring-module is made from 8 units connected into a ring with the overlapped method.

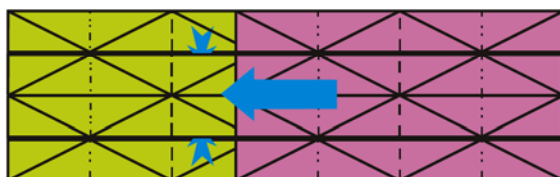
1

Have the 8 units of appropriate colours ready for connecting. We'll show it on an example of the Chess Magic Star.



2

Stretch two of the units. Now the half of the right unit will go atop and overlap the half of the left unit.

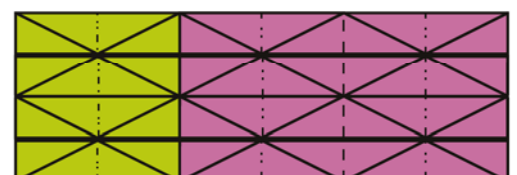


3

Inserting the layers of the right unit into the double step-folds of the left unit, slide the paper, so the 2 sections of the right unit completely cover the 2 sections of the left unit.

4

This should be the result. Now make 'valleys' and 'mountain' folds over the connected sections, thereby locking the connection.



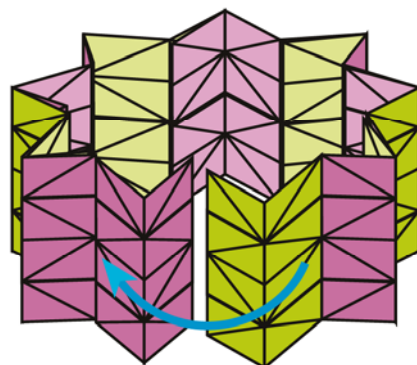
5 This should be the result. Now add the 6 remaining modules in the same way.



6 Now we need to connect the resulted strip into a ring. Bring the left-hand side round to meet the right-hand side.

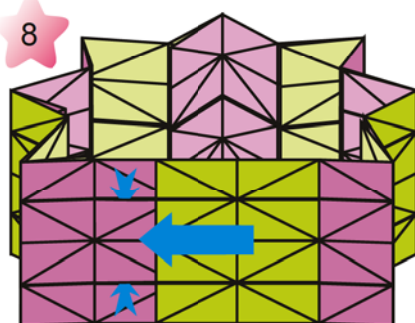
Inserting the layers of the right-hand end into the double step-folds of the left-hand end, slide the paper, so the 2 sections of the right-hand end completely cover the 2 sections of the left-hand end.

7



This should be the result. Now 2 sections will overlap the other 2 sections.

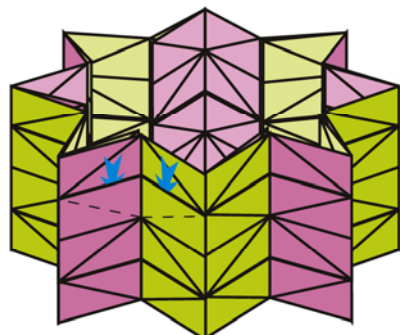
This should be the result. Now make 'valleys' and 'mountain' folds over the connected sections, thereby locking the connection.



8



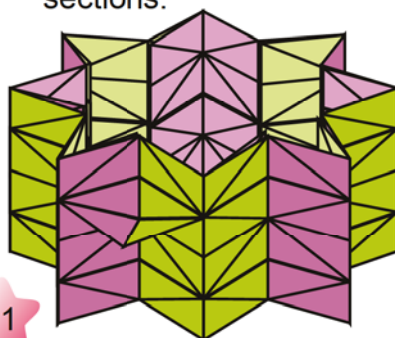
9



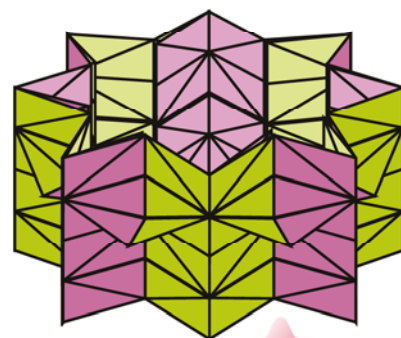
10

Working with one double section, separate the layers of the step-fold as shown and along the existing fold-lines valley fold the border into a cornice-like position.

This should be the result. Repeat step 10 for each of the 7 remaining double sections.



11



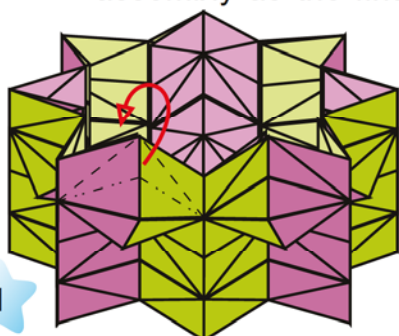
12

Here is the completed Ring-Module, made out of 8 units!



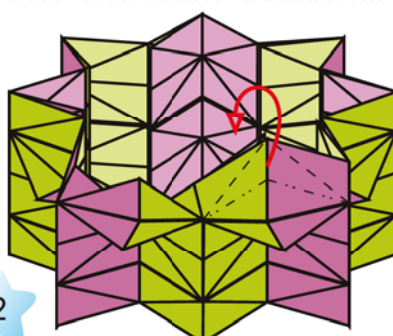
## The last Ring-Module Is Special!

As you prepared all 6 Ring-Modules, take the last one you will use in the assembly as the final module and make additional folds on it as shown.



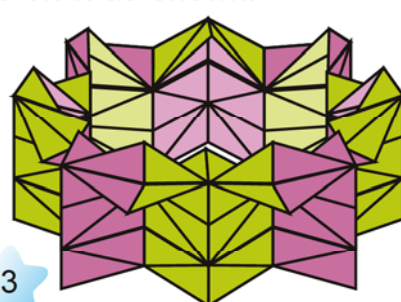
1

Working with the upper edge of the one double section, fold it along the existing fold-lines into a position shown in the next step.



2

This should be the result. Now repeat with each upper edge of double sections.

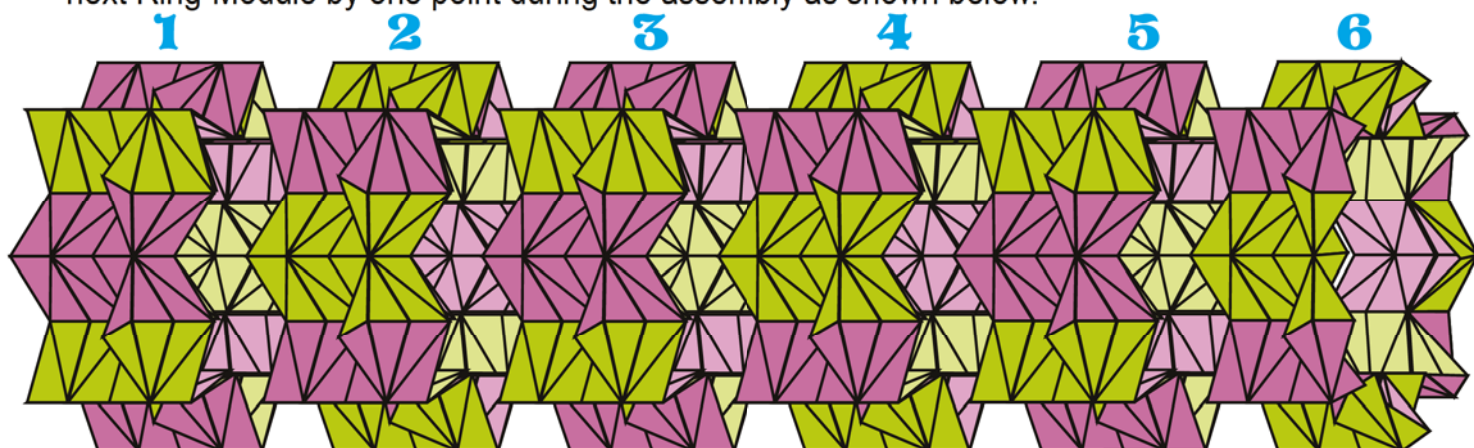


3

Here is the completed special last Ring-Module!

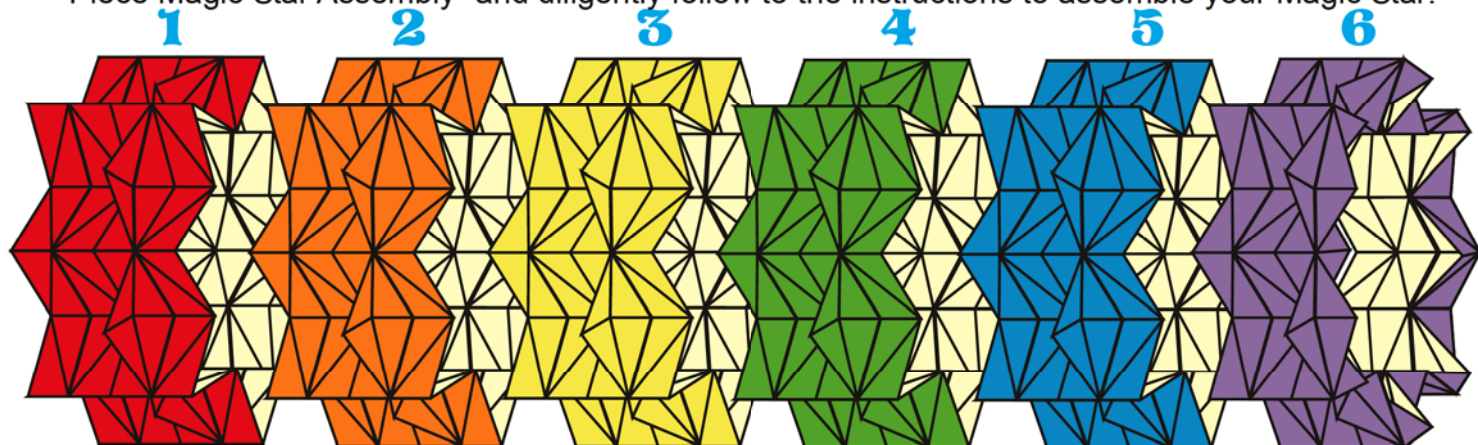
## 6 Ring-Modules For Chess Magic Star

6 Ring-Modules, including the special last Ring-Module for the Chess Magic Star are ready. The assembly is the same as for any Multi-Piece Magic Star as shown in the article 'Multi-Piece Magic Star Assembly'. To receive the right effect of the Chess Magic Star, you have to shift of each next Ring-Module by one point during the assembly as shown below.



## 6 Ring-Modules For Rainbow Magic Star

In case of the regular rainbow version, position 6 Ring-Modules as shown. Go to the article 'Multi-Piece Magic Star Assembly' and diligently follow to the instructions to assemble your Magic Star!



>>> jump to 'Multi-Piece Magic Star Assembly' article >>>

Magic Star (48 squares) © 2011 Yuri and Katrin Shumakov - page 7

[www.oriland.com](http://www.oriland.com)

Oriland Magic Star - page 44



## Ghiyo Magic Star

For this Magic Star design you may also use colour paper with patterns such as Chiyogami, famous Japanese paper. Make sure that paper is strong and flexible with tensile strength, as there will be a certain tension during the assembly of the star and during its further rotation. You may keep the same scheme of 6 spectral colours of rainbow: red, orange, yellow, green, blue, and violet. So each of 6 Ring-Modules made out of 8 squares will be in one colour, but can be with various patterns to them or just with one repeated pattern.

So pick 48 squares of appropriate colouring. Experiment with different papers receiving desired colours and patterns combinations.



Suggested sizes: It's advisable to take large squares of paper to master the whole model, for instance 5 1/2-inch (14 cm) squares, in this case the diameter of the finished 8-point star will be measuring about 7 inches (17 cm).



**>>> jump to 'Multi-Piece Magic Star Assembly' article >>>**

Magic Star (48 squares) © 2011 Yuri and Katrin Shumakov - page 8

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**Oriland Magic Star - page 45**





# Multi-Piece Magic Star Assembly

by Yuri and Katrin Shumakov

This method of assembly works for all the multi-piece Magic Stars presented in this book, including the 7-Point Magic Star (6 strips, 2:8) and 8-point stars - Magic Star (6 strips, 2:8), Magic Star (6 strips, 2:9), Magic Star (12 strips, 2:5), Magic Star (48 squares).

All these multi-piece Magic Stars share the unified global structure – each of them consists of 6 ring-modules that assemble into the star using the same method.

Depending on a magic star variation, the ring-module folds from a strip or 2 strips, or 8 squares.

Practically all the variants of the ring-module are using overlapping method of connection, except one variant with using transparent tape to connect the strip into the ring.

It's advisable to comprehend the assembly on an example of a symmetrical 8-point Magic Star, because the less tension of paper is involved into the process and the resulted design, comparing to the assembly of an asymmetrical 7-point Magic Star.

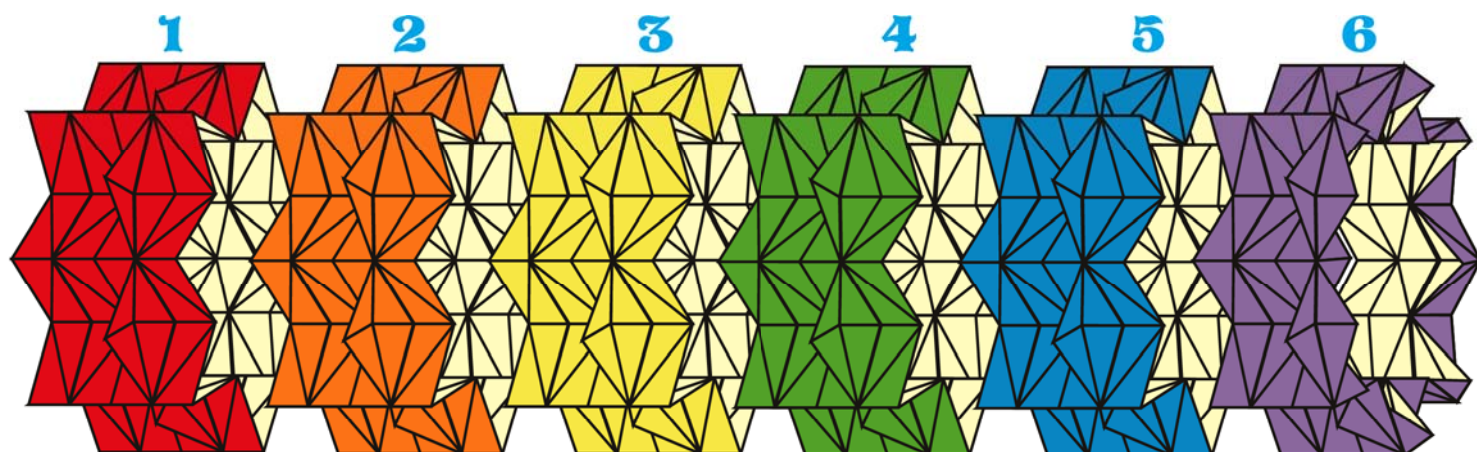
Also, the assembly is better to understand when connecting the ring-modules made from strips; in this way there is a minimum of overlapped layers (or there is no them at all) as they may distract your attention from the process of the assembly or be occasionally displaced, which can lead to an error of the assembly.

During the assembly of strip versions of the Magic Star, where ring-modules have overlapped layers, be sure that each next ring-module is shifted, so the overlapped layers evenly distributed on the star. This will make the star itself more balanced and will facilitate rotation. In case of the Yin-Yang Magic Star, this shift is having a specific order as shown in its article.

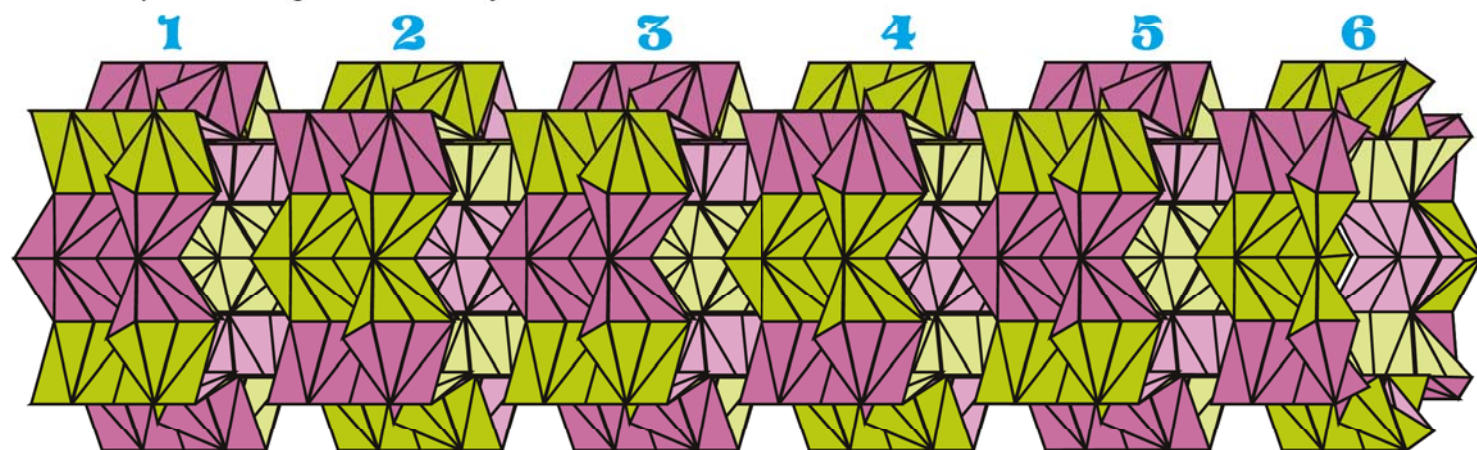




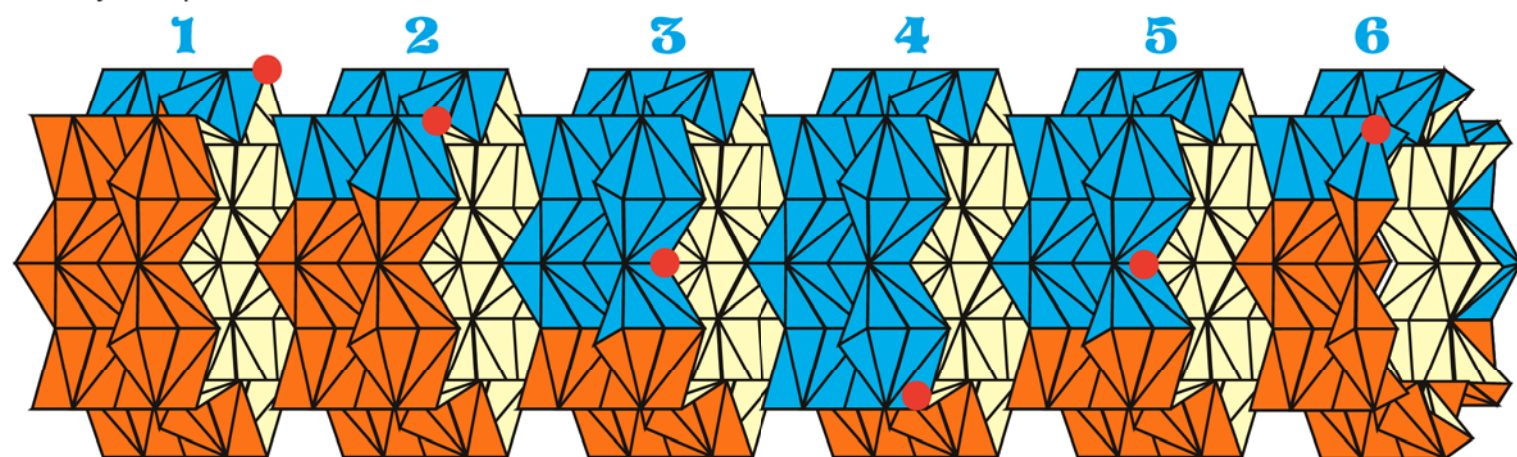
Whatever multi-piece magic star you are going to fold, be sure you prepared all the 6 ring-modules in the specific order, including the last special module with additional folds on it.



To receive the right effect of the Chess Magic Star, you have to shift of each next Ring-Module by one point during the assembly as shown below.



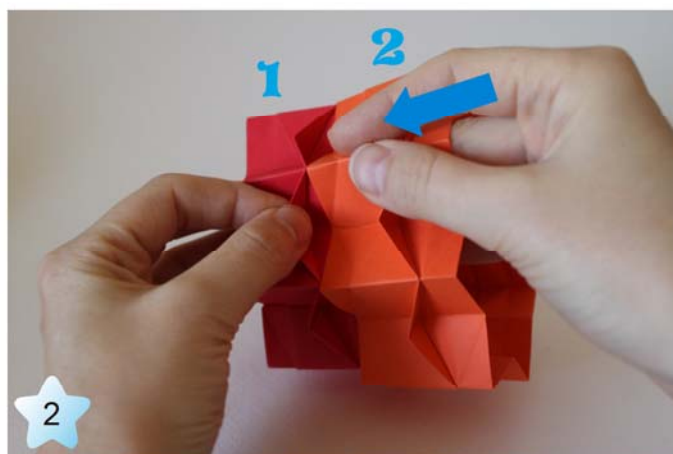
To receive the effect of interweaved colours of the Yin-Yang Magic Star, you have to follow the sequence of colour shift of each next Ring-Module as shown below. The 4 first Ring-Modules are shifted by one point in the same direction (say, counterclockwise) and the 2 last ones are shifted by one point in the reverse direction.



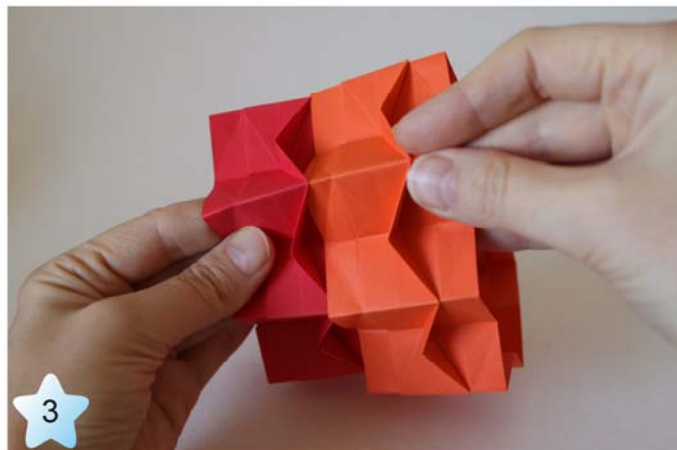




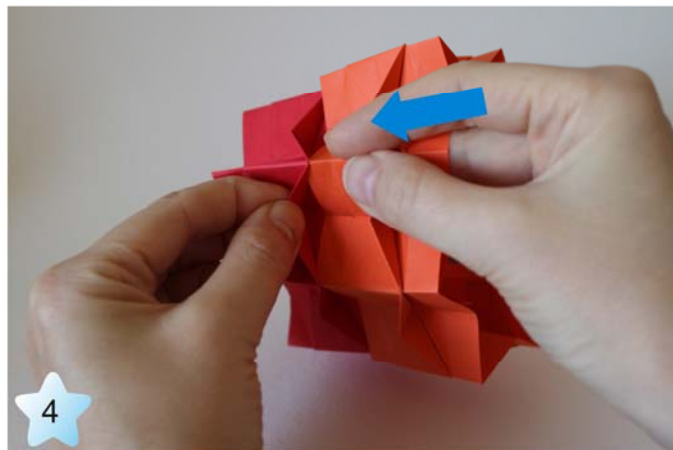
Get ready 6 Ring-Modules in an appropriate order, including the special last Ring-Module with additional folds on it.



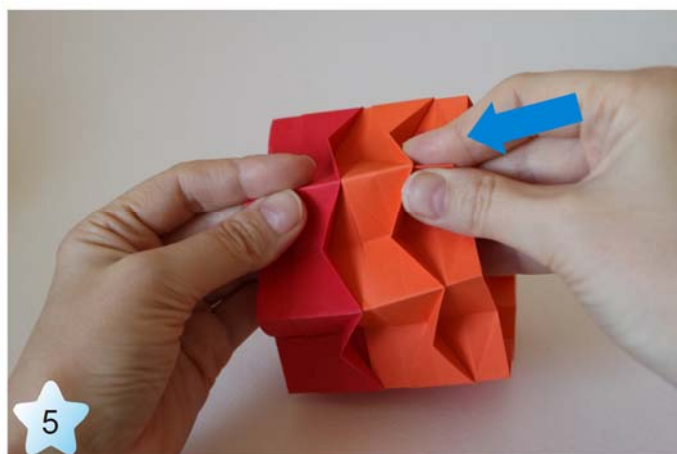
Take 1st and 2nd Ring-Modules and position them accordingly in relation to each other. Opening slightly the cornice-like fold on one of the sections of the 1st Ring-Module, insert a bit one corner of the 2nd Ring-Module as shown.



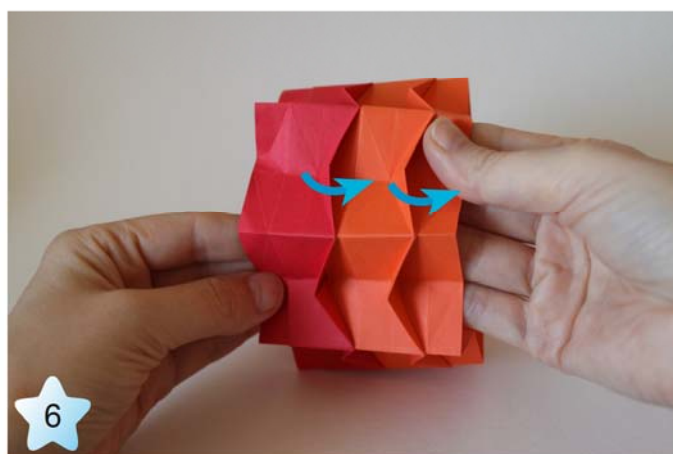
This should be the result. Insert the corner only half-way under the folds of the 1st Ring-Module as shown.



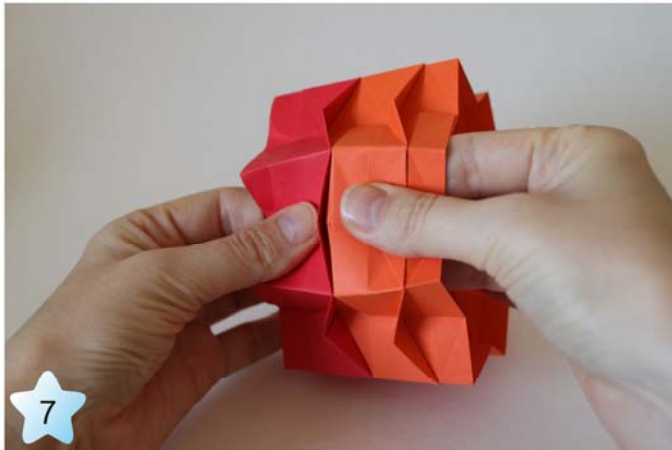
Consistently insert (half-way) other corners of the 2nd Ring-Module under the folds of the 1st Ring-Module.



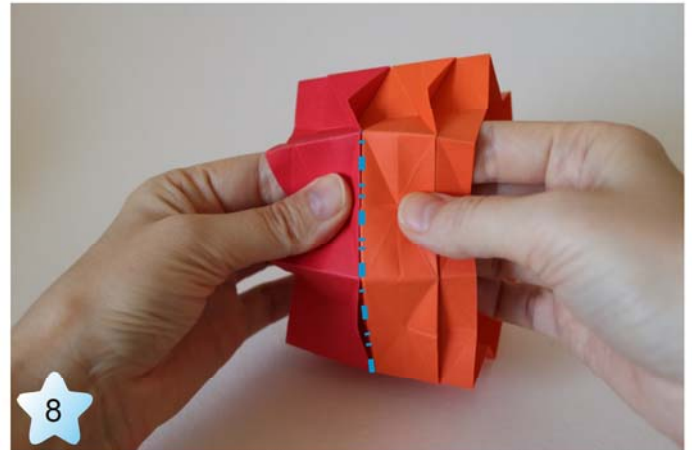
Now when all the corners of the 2nd Ring-Module inserted half-way, move each them further as far as it goes under the folds of the 1st Ring-Module.



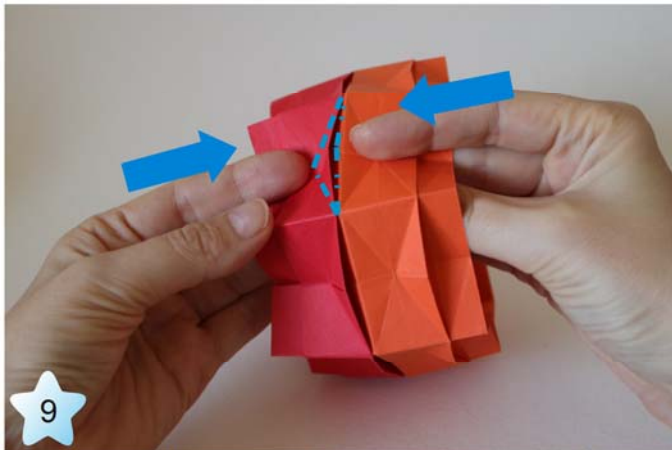
This should be the result. Now flatten the cornice-like folds on one double section as shown.



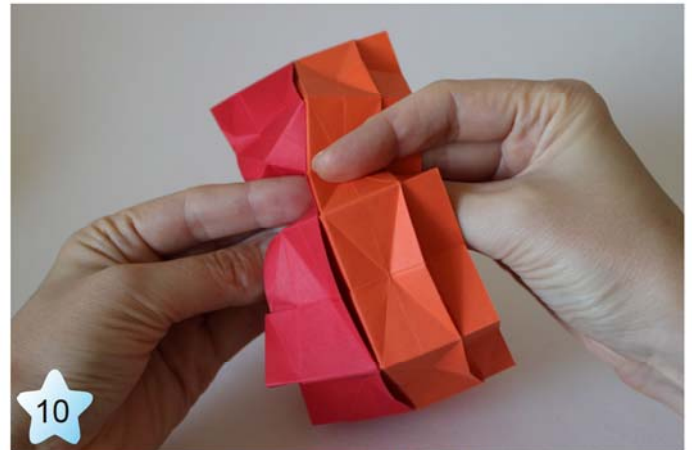
Flattening paper from both sides, make the 'mountain' fold through all the layers of both modules along the line of their connection, as shown.



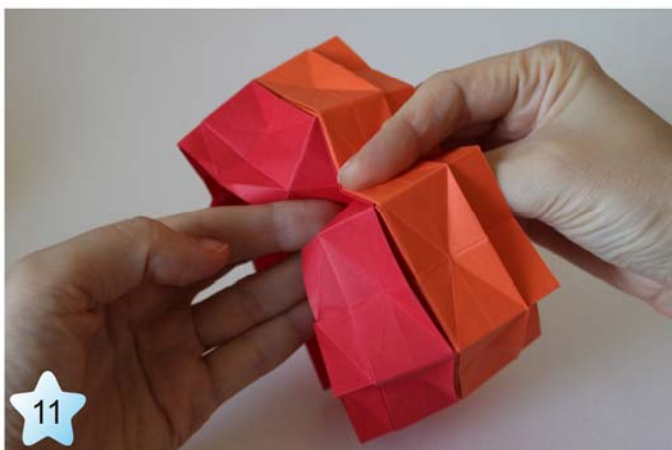
Repeat step 7 for each double section.



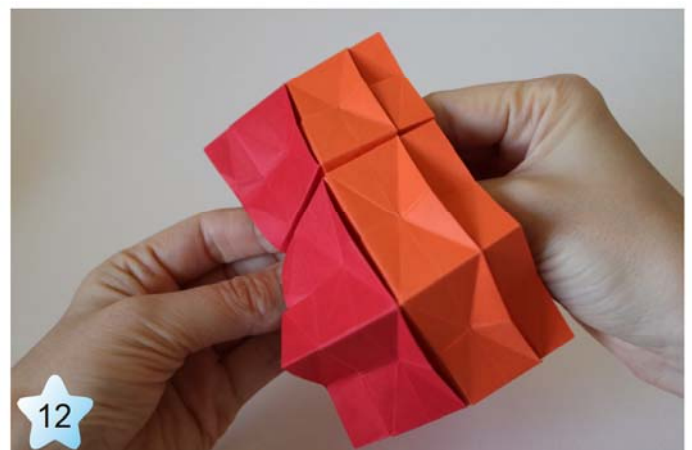
Working with one double section, move layers closer into the 'mountain' fold along the existing fold-lines...



...making the cornice-like fold and thereby locking the 2 Ring-Modules in this section.

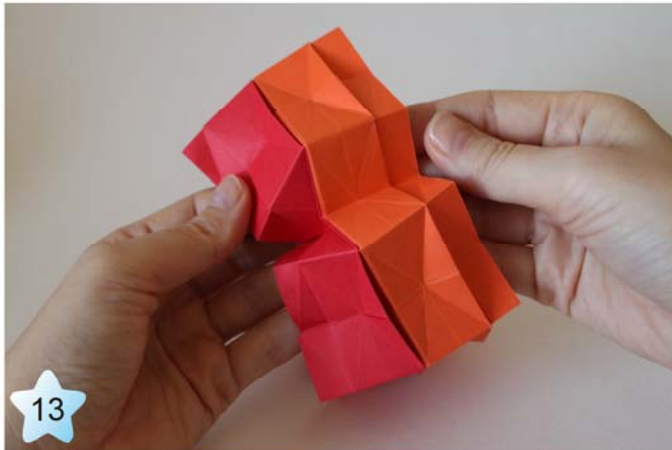


This should be the result.

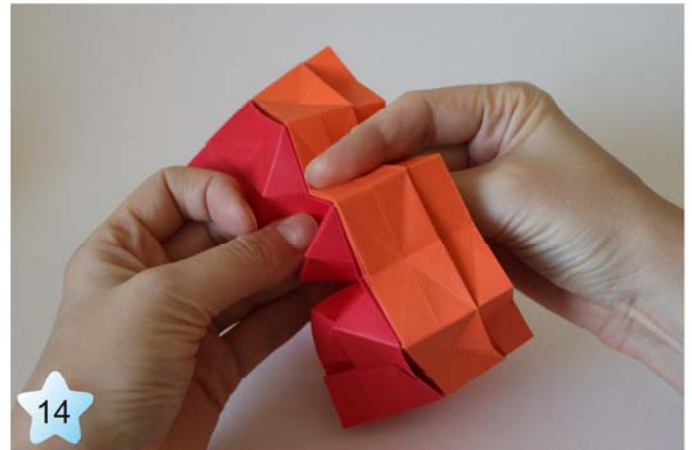


Compress the layers of this section from underneath to secure the folds.

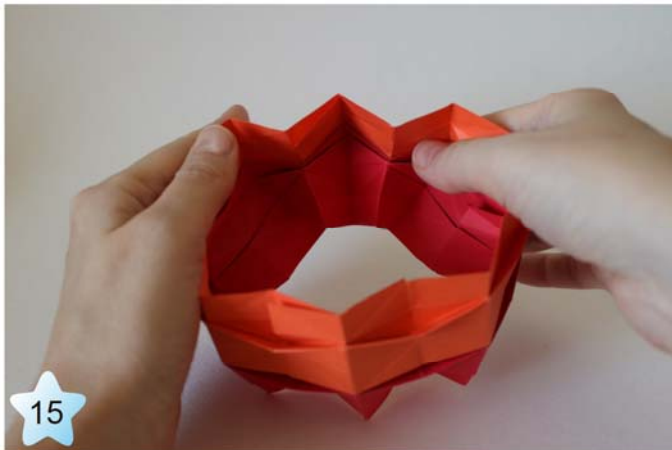




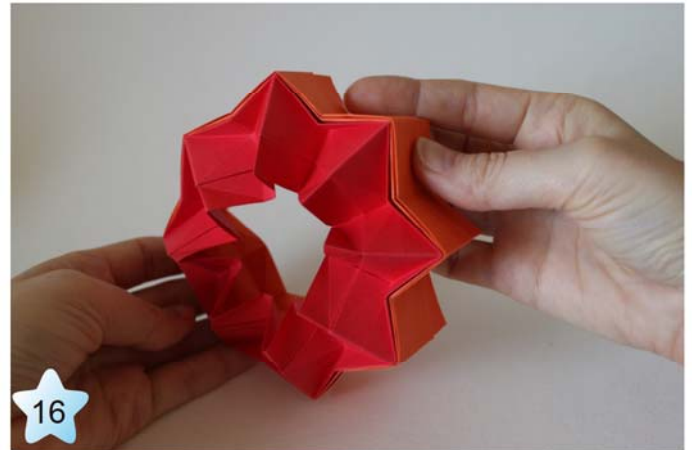
13  
This should be the result. Now repeat the steps 9 to 12 with the next double section.



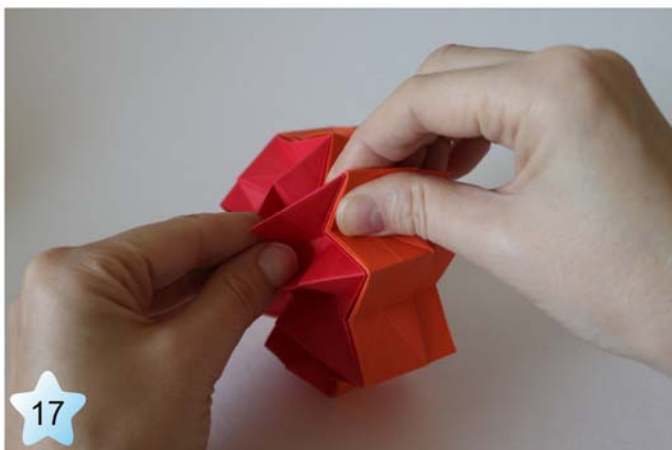
14  
This should be the result. Compress the layers of this section from underneath to secure the folds.



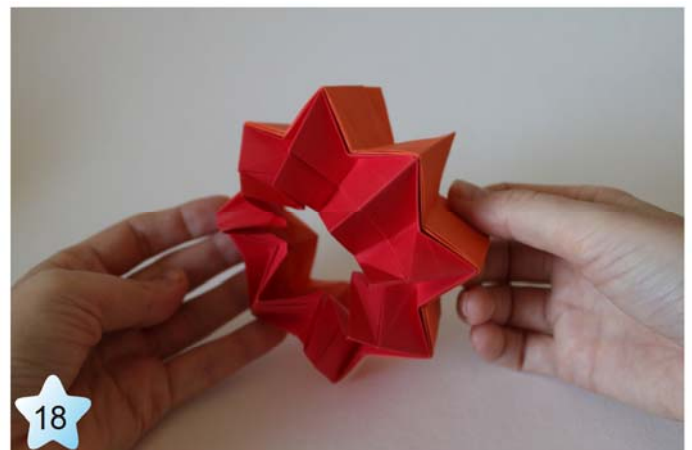
15  
The view of the formed section from the inside.



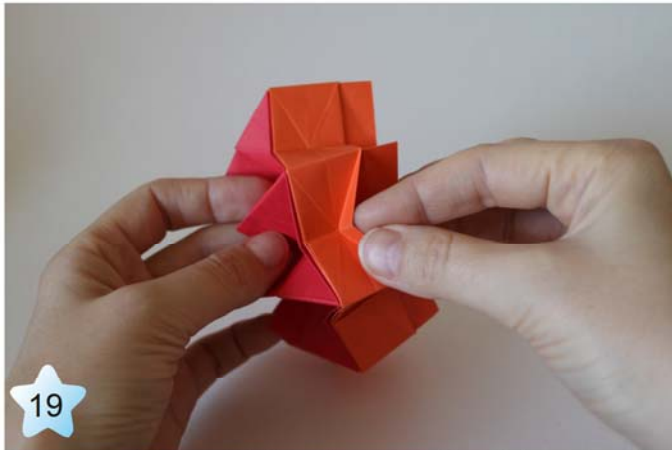
16  
Now repeat the steps 9 to 12 with the remaining double sections, thereby forming the cornice-like folds and locking the 2 Ring-Modules together.



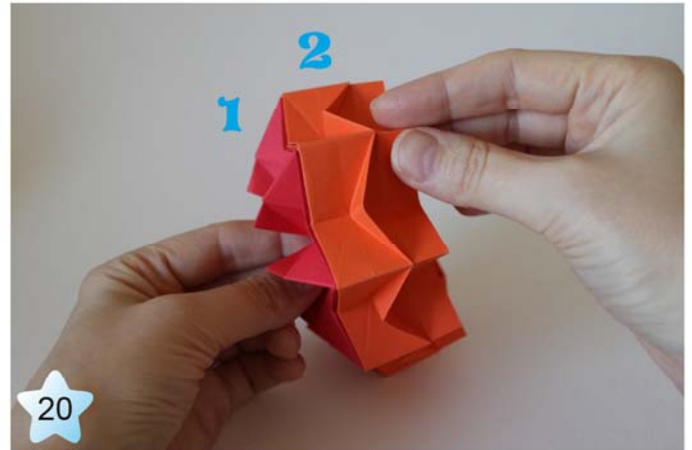
17  
When all the sections are formed, consistently compress the folds of double sections from outside as shown.



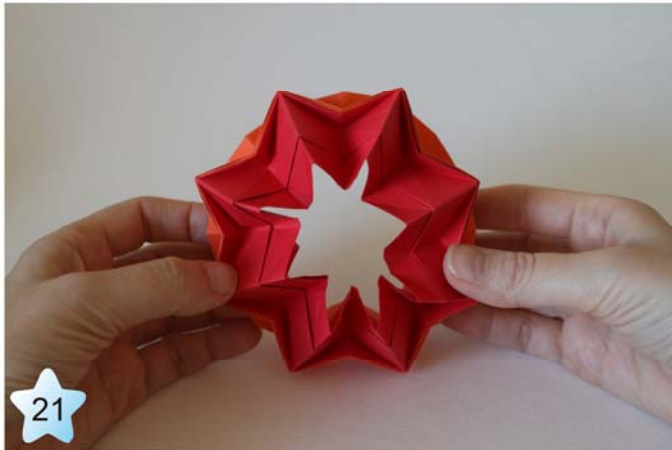
18  
This should be the result.



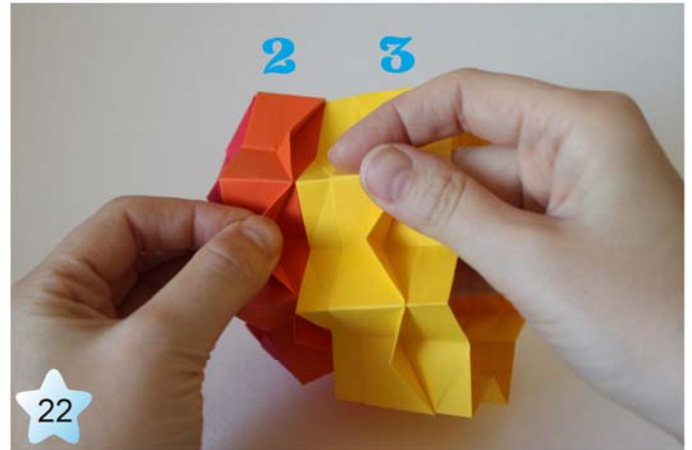
19  
Now working with the border Ring-Module (the 2nd), bring back the cornice-like fold on its double sections as shown.



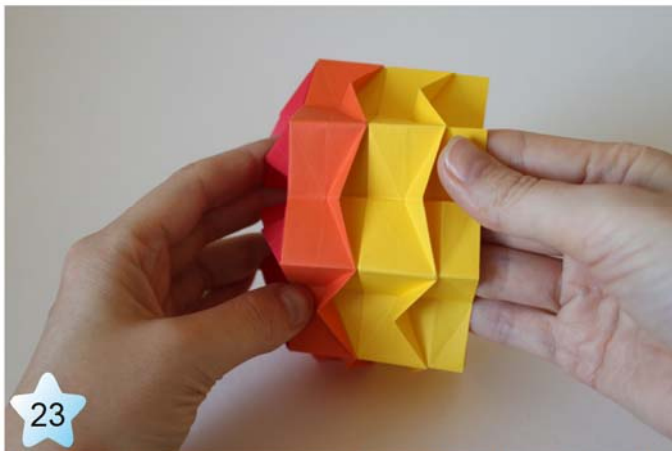
20  
This should be the result. Now the 2nd ring-module is prepared to attach the next Ring-Module to it.



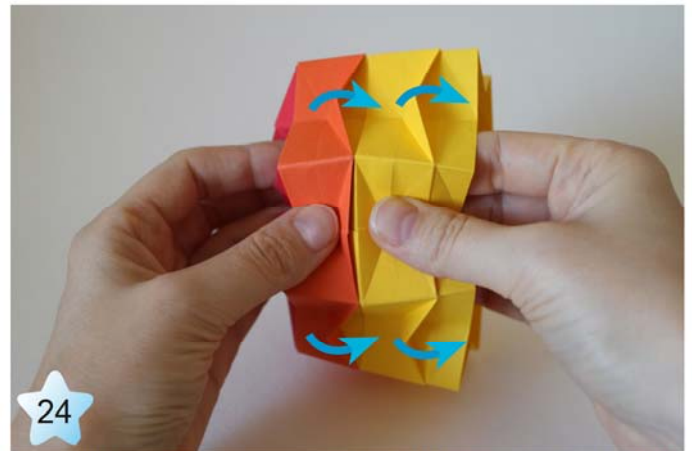
21  
Here is the front view of the 2 connected Ring-Modules.



22  
Now let's add 3rd Ring-Module. Opening slightly the cornice-like fold on one of the sections of the 2nd Ring-Module, insert half-way one corner of the 3rd Ring-Module under the folds as shown. Then repeat the same with all the corners.

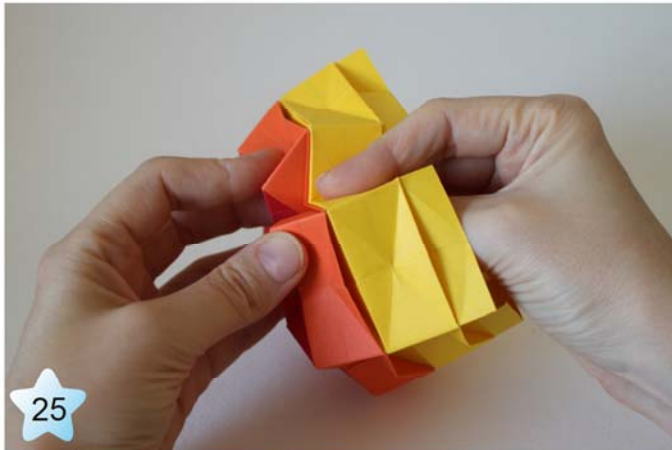


23  
Insert all the corners of the 3rd Ring-Module further as far as it goes under the folds of the 2nd Ring-Module.

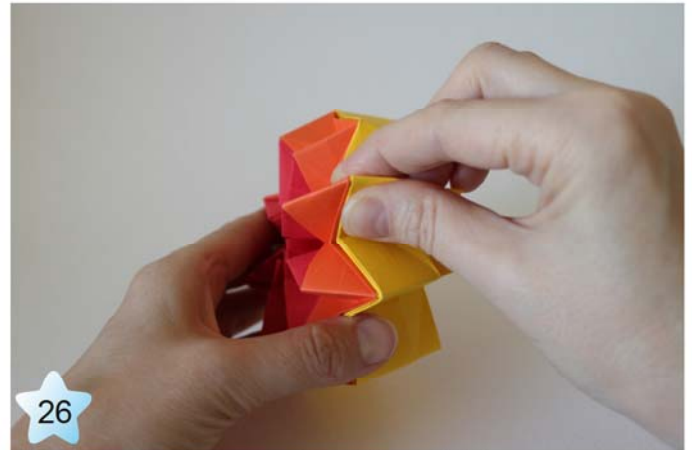


24  
Now flatten the cornice-like folds on all the double sections of the connecting Ring-Modules as shown.

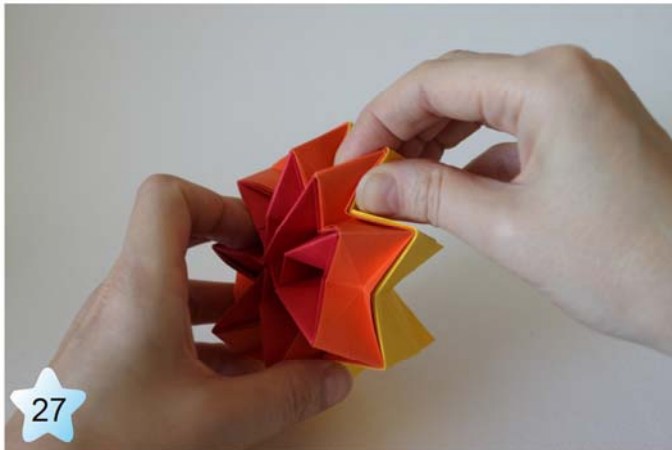




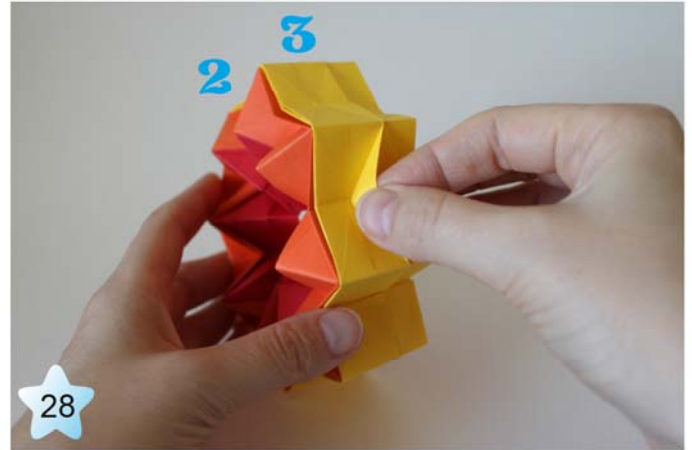
25  
Consistently, make the cornice-like folds on each double section, thereby locking the 2nd and 3rd Ring-Modules together.



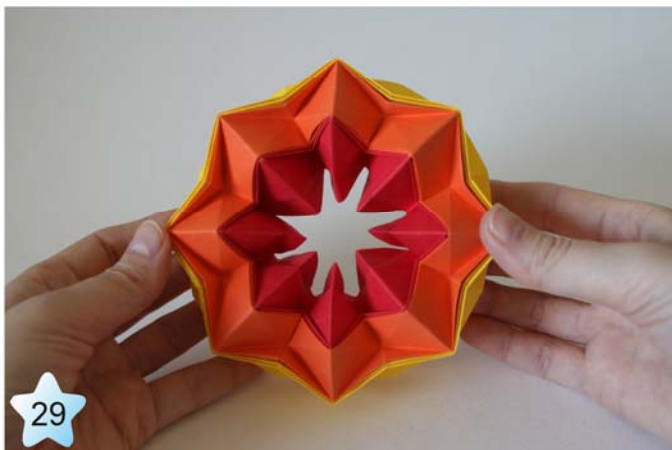
26  
When all the cornice-like folds are made, consistently, compress the layers of each section as shown to secure the folds.



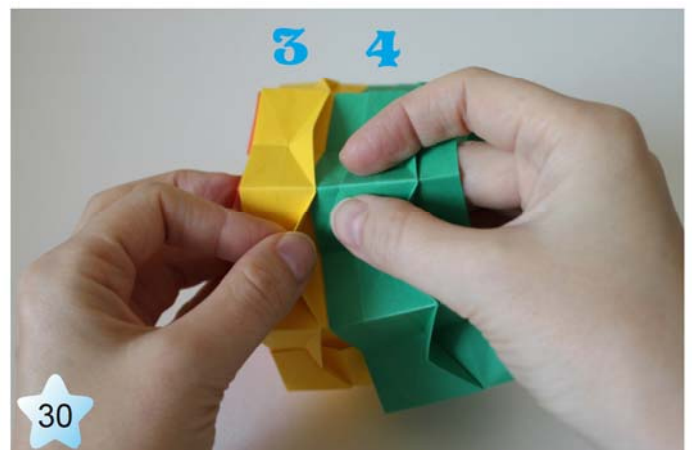
27  
While compressing the folds, pay attention that the previous Ring-Modules, the 1st and 2nd, should move into the centre, so that the 3rd Ring-Module is positioning along the equator.



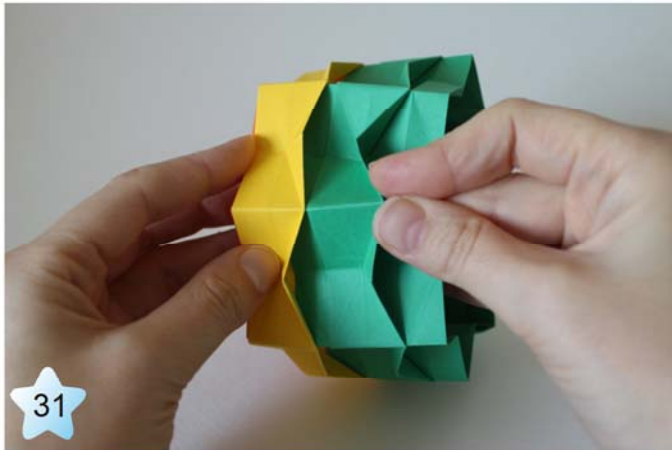
28  
Now the 3rd Ring-Module is positioned along the equator. On its double sections, set the cornice-like folds into the initial position as shown.



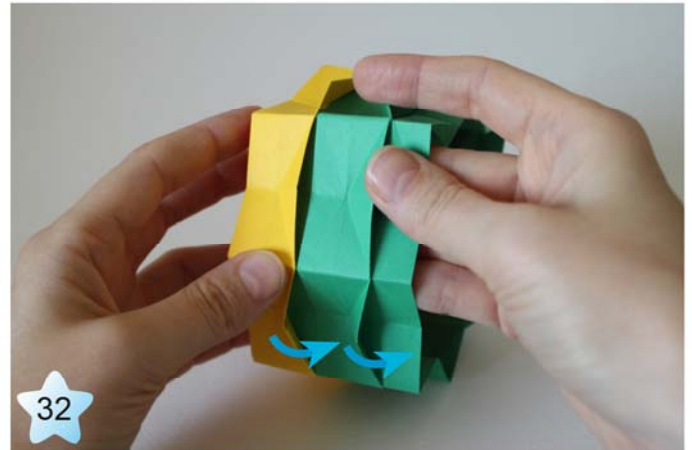
29  
This should be the result. Here is the front view of the 3 connected Ring-Modules.



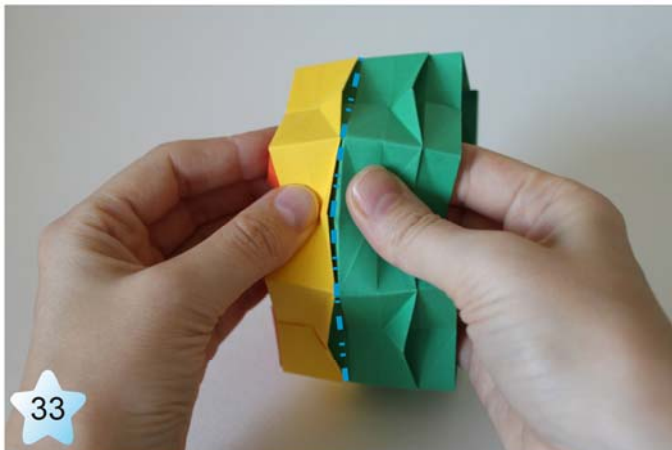
30  
Now let's add 4th Ring-Module in the same way. Insert half-way one corner of the 4th Ring-Module under the folds of the 3rd Ring-Module as shown. Then repeat the same with all the corners.



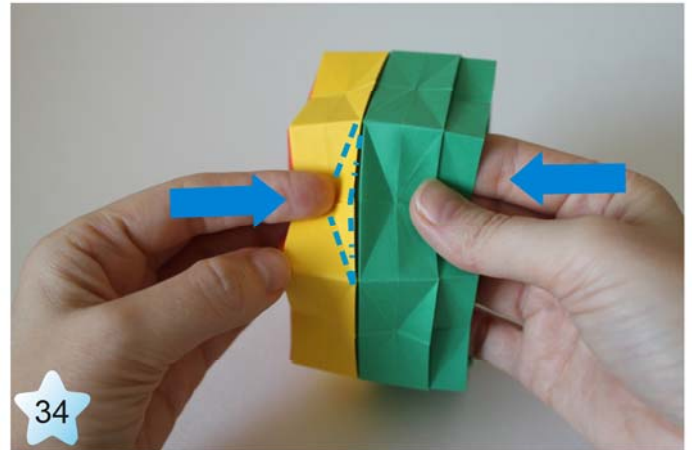
Insert all the corners of the 4th Ring-Module further as far as it goes under the folds of the 3rd Ring-Module.



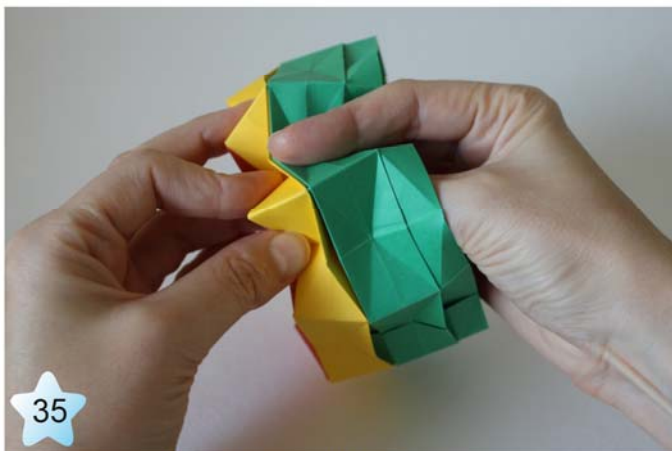
Now flatten the cornice-like folds on all the double sections of the connecting Ring-Modules as shown.



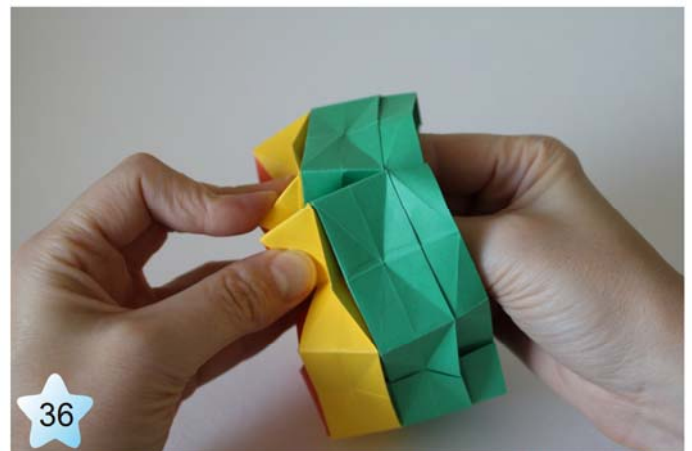
Make the 'mountain' fold through all the layers of both modules along the line of their connection, as shown.



Now make the cornice-like fold and thereby locking the two Ring-Modules in this section.

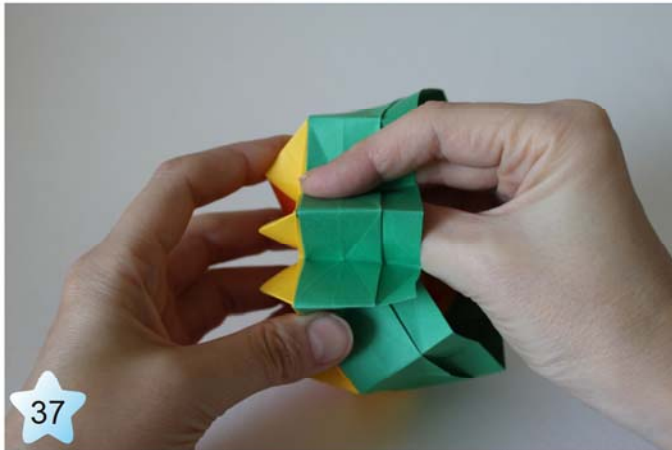


This should be the result.

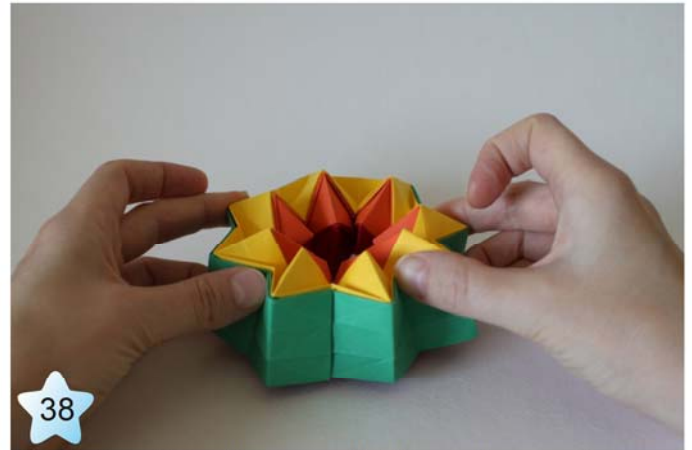


Don't forget to compress the layers of this section from underneath to secure the folds. Then continue to lock the next double section with the cornice-like fold.

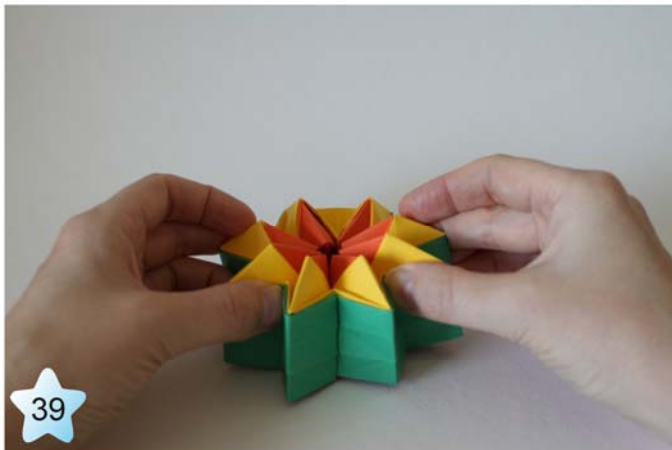




37  
Continue to lock each double section with the cornice-like fold and compress the layers of each section from underneath to secure the folds.



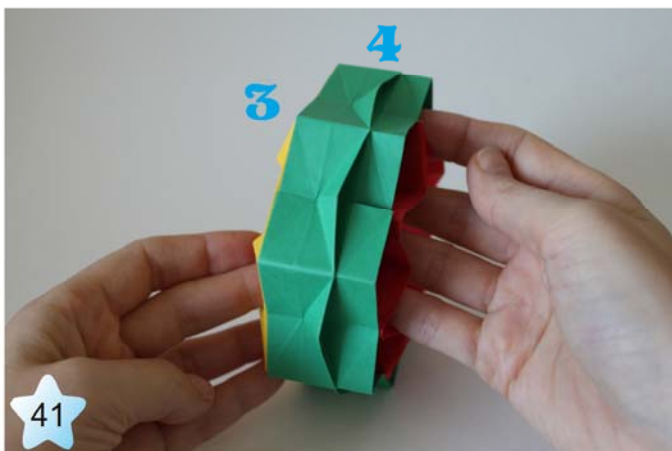
38  
This should be the result. Place the model on a flat surface like that. Consistently compress the folds of each section from outside to secure the folds.



39  
Now squeeze the model to the centre, thereby securing the folds, and then loosen it. Note that the previous Ring-Modules, the 1st, 2nd and 3rd, should move into the centre, so that the 4th Ring-Module is positioning along the equator.



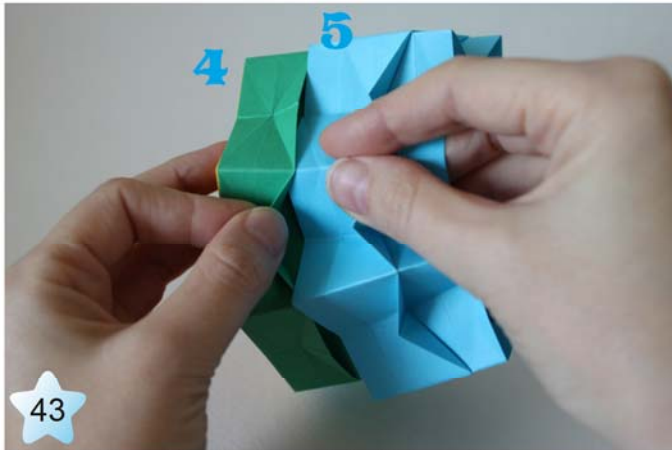
40  
Now when the 4th Ring-Module is positioned along the equator, on its double sections, set the cornice-like folds into the initial position as shown.



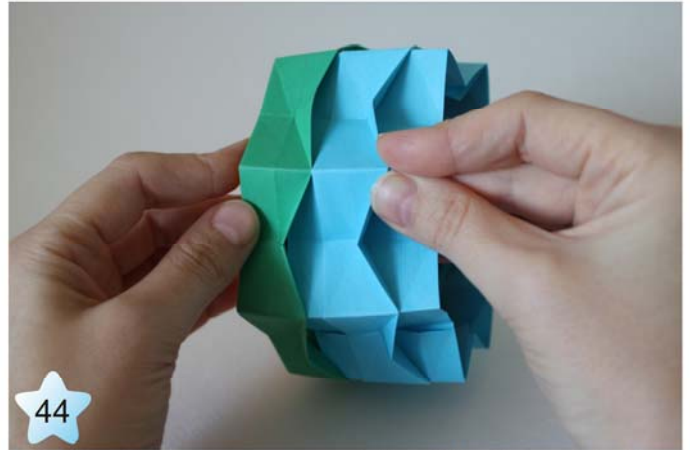
41  
This should be the result. Now the 4th Ring-Module is ready for inserting the 5th Ring-Module into it.



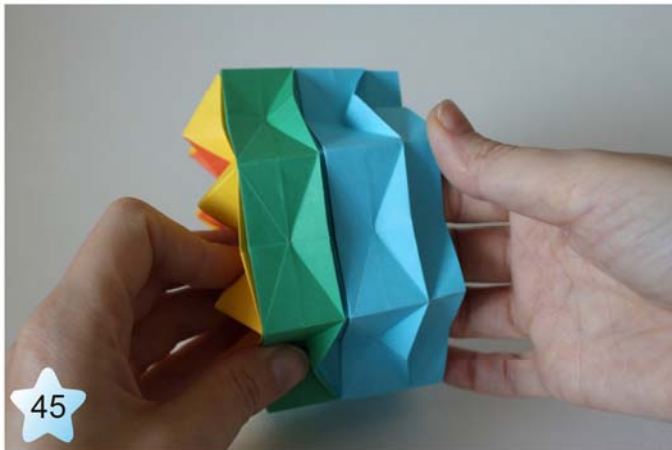
42  
Here is the inside view of the 4 connected Ring-Modules.



Now let's add 5th Ring-Module in the same way. Insert half-way one corner of the 5th Ring-Module under the folds of the 4th Ring-Module as shown. Then repeat the same with all the corners.



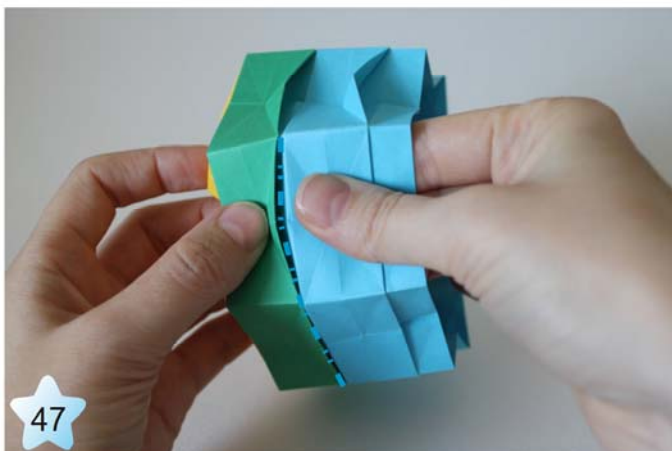
Insert all the corners of the 5th Ring-Module further as far as it goes under the folds of the 4th Ring-Module.



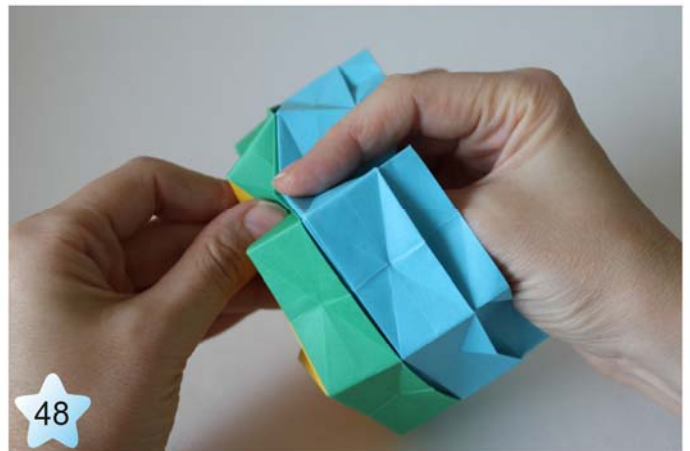
This should be the result. Now flatten the cornice-like folds on all the double sections of the connecting Ring-Modules as shown.



Here is the inside view.

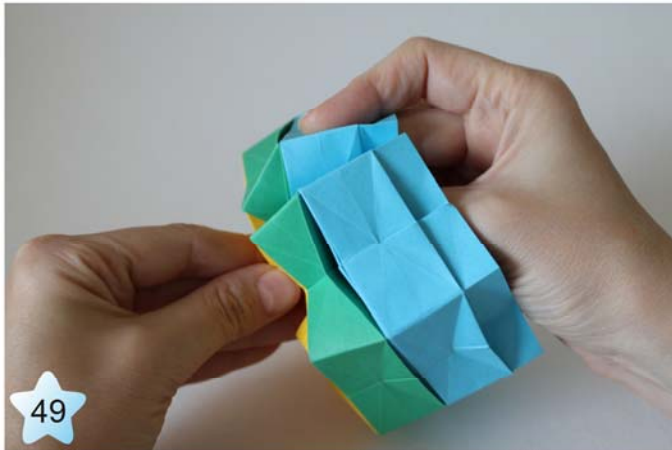


Make the 'mountain' fold through all the layers of both modules along the line of their connection, as shown.

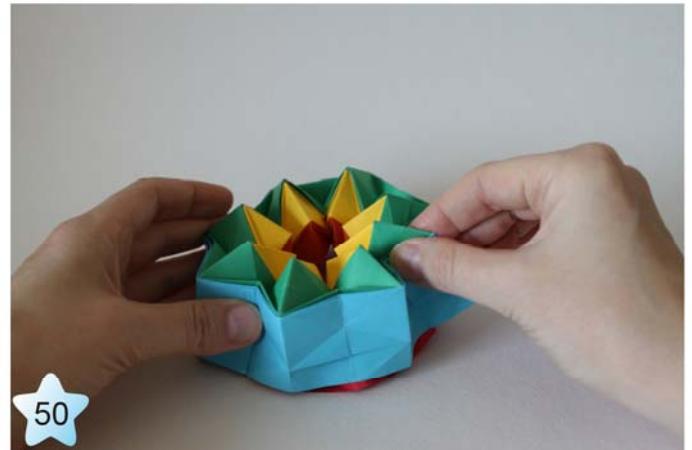


Now make the cornice-like fold and thereby locking the two Ring-Modules in this section.





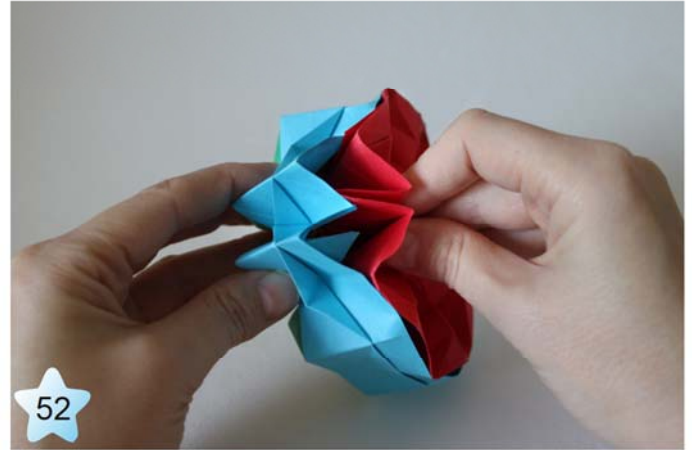
49  
Don't forget to compress the layers of this section from underneath to secure the folds. Then continue to lock each double section with the cornice-like fold in the same way.



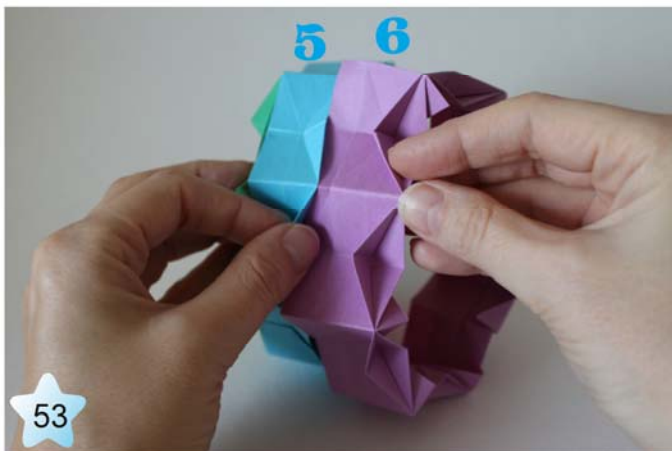
50  
This should be the result. Place the model on a flat surface. Consistently compress the folds of each section from outside to secure them, squeezing the model to the centre slightly. Note that the 5th Ring-Module is on the equator.



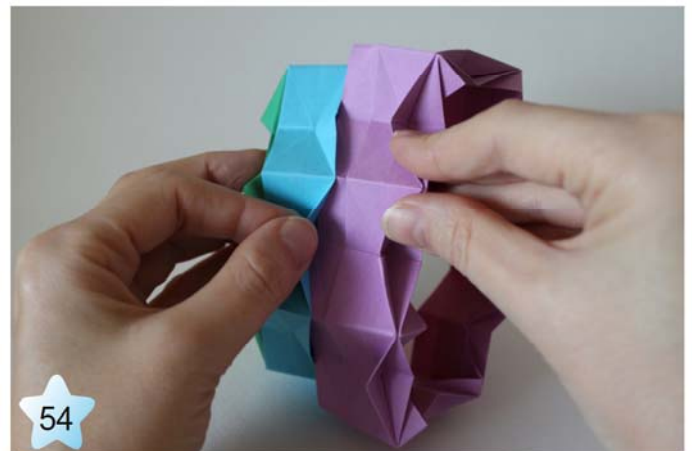
51  
Now keeping the model squeezed a bit, work with the 5th Ring-Module on the equator and on its double sections, set the cornice-like folds into the initial position as shown.



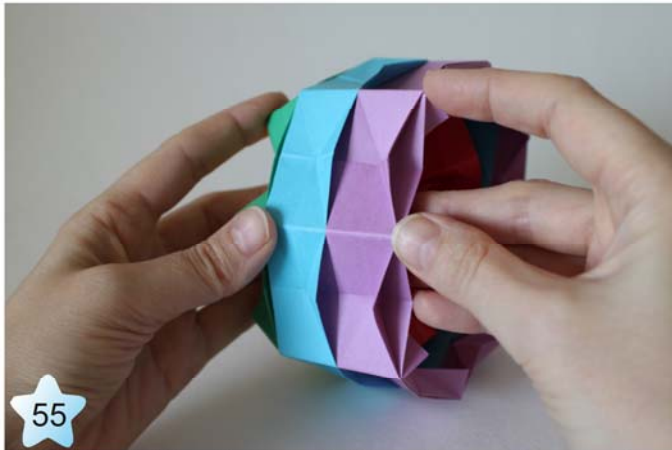
52  
Now consistently squeeze a bit each double section, thereby preparing the room for the final Ring-Module.



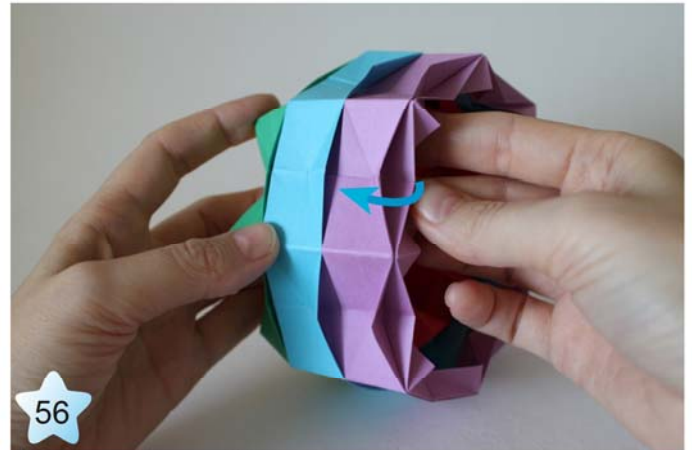
53  
Now let's add the final 6th Ring-Module, the special one. Opening slightly the cornice-like fold on one of the sections of the 5th Ring-Module, insert half-way one corner of the 6th Ring-Module under the folds as shown.



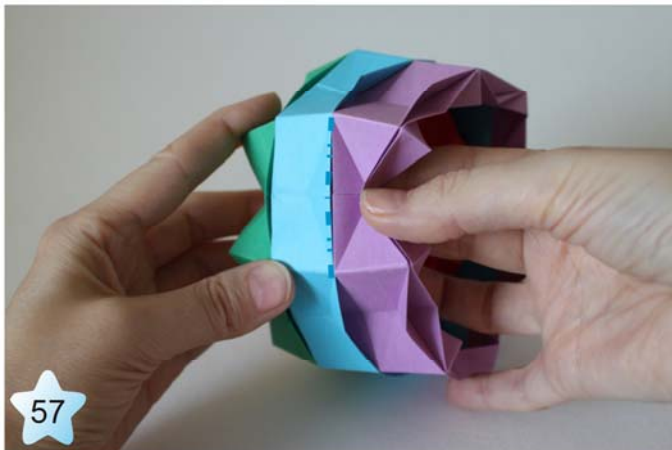
54  
This should be the result. Then insert half-way all the corners of the 6th Ring-Module and afterwards move them further as far as it goes under the folds of the 5th Ring-Module.



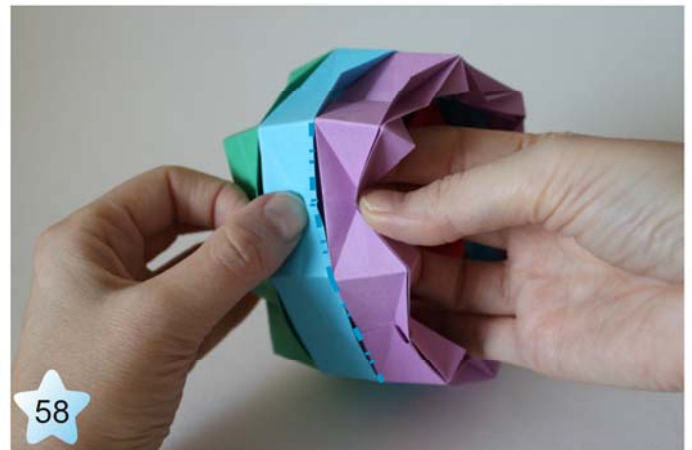
55  
This should be the result. Now flatten the cornice-like folds on all the double sections of the connecting Ring-Modules as shown.



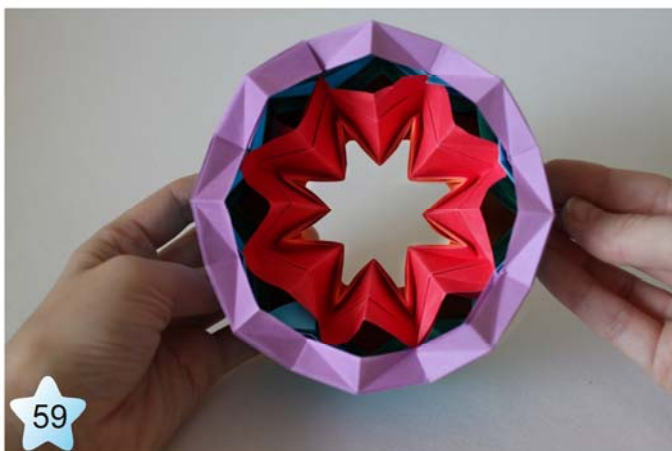
56  
Now working with one double section on the 6th Ring-Module, close the open folds into a double cornice-like fold...



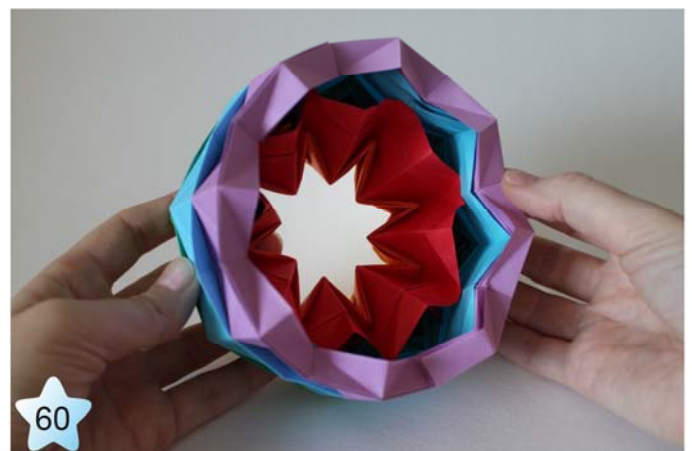
57  
...at the same time form the 'mountain' fold through all the layers of both modules along the line of their connection as shown.



58  
Repeat steps 56 and 57 for each double section.

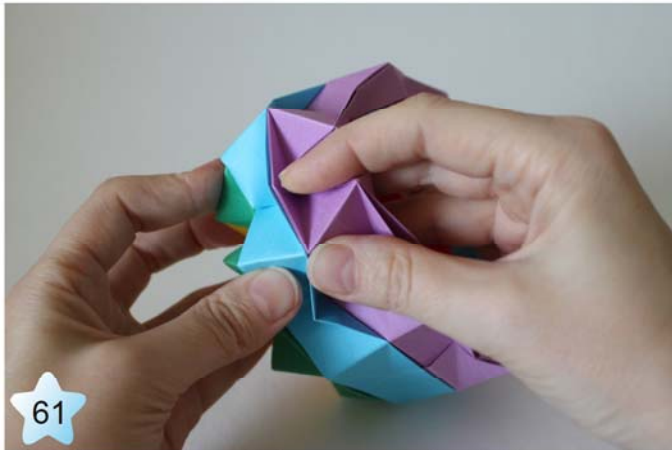


59  
Here is the inside view.



60  
Now we are ready to shape the cornice-like folds, locking the 5th and 6th Ring-Modules together. Note that the work with the final Ring-Module is very challenging. We will keep the model squeezed a bit to facilitate the process.

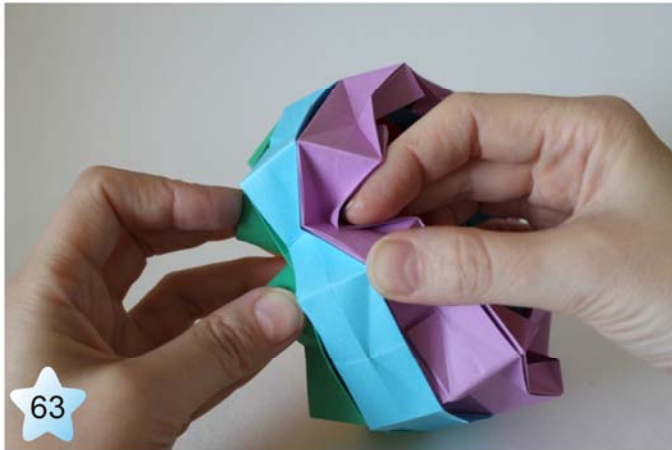




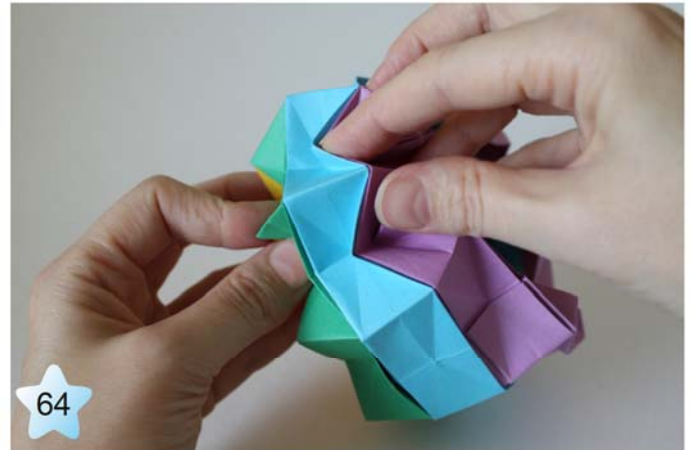
61  
Keeping the model squeezed a bit, make the cornice-like fold and thereby locking the two Ring-Modules in this section.



62  
Note that the edge of the 6th Ring-Module is shaping into the cornice-like fold too.



63  
It's not easy now to compress the layers from underneath to secure the folds; make it accurately inserting your fingers between the layers of the 6th and 1st Ring-Modules. Continue locking the next double section with the cornice-like fold.



64  
As you did the cornice-like fold on the next double section, you now can secure the folds between them from outside as shown. Don't forget to keep the model squeezed a bit to facilitate the process; you can lean it against the table.

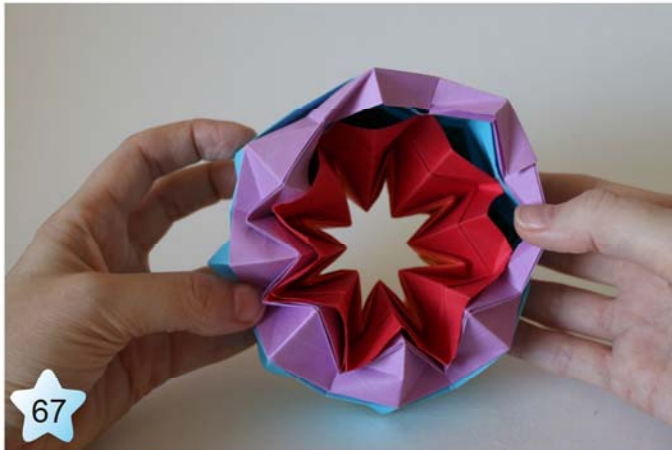


65  
This should be the result: 2 double sections are locked together. Before continuing with the other sections, let's straighten appropriate layers of the 1st Ring-Module...

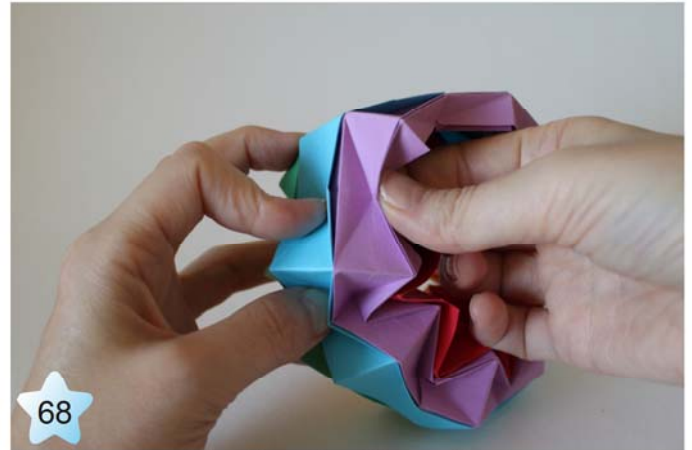


66  
Keeping the locked sections squeezed a bit, straighten the layers of the 1st Ring-Module, placing them atop of the edge of the 6th Ring-Module as shown. Then, repeat steps 61 to 66 for other sections.

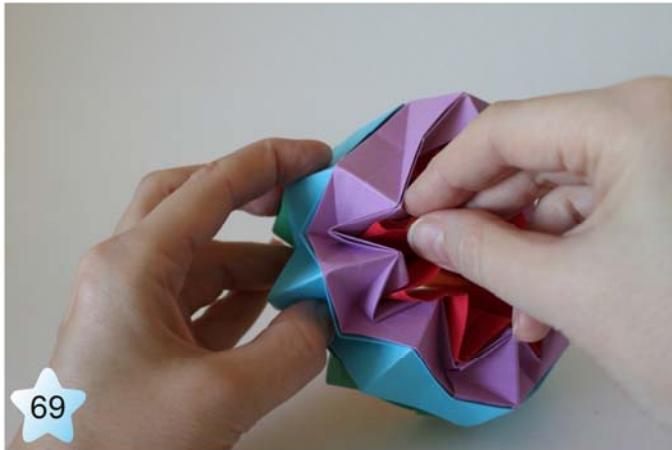




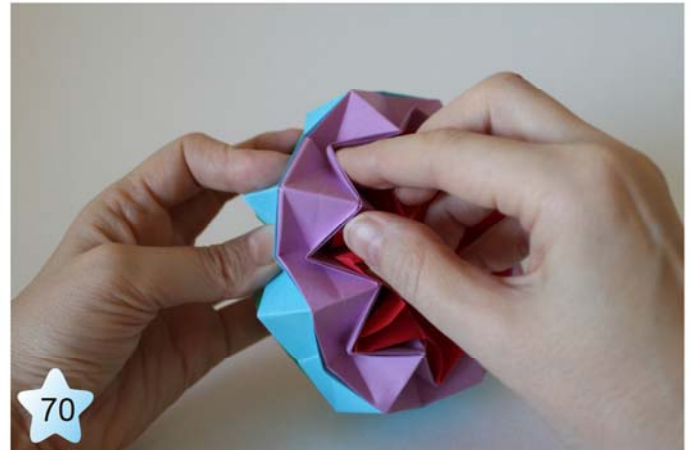
67  
After locking each section, don't forget to straighten the appropriate layers of the 1st Ring-Module, placing them atop of the edge of the 6th Ring-Module as shown. Do not hurry, checking so that each layer is in the correct place.



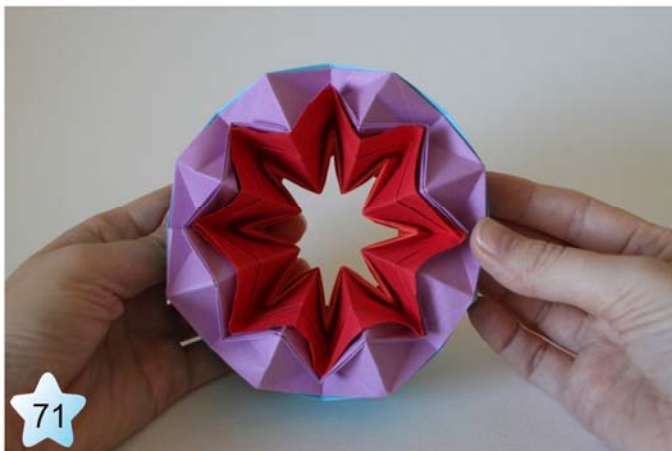
68  
Continue locking the double sections, accurately secure the folds from underneath and then from outside.



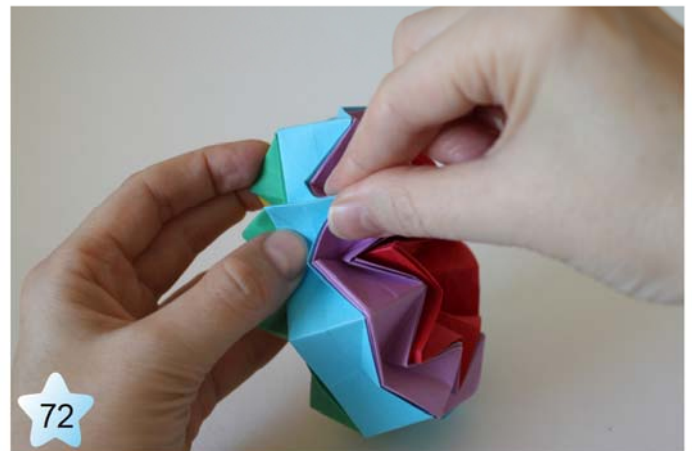
69  
Consistently, straighten the layers of the 1st Ring-Module, placing them atop of the edge of the 6th Ring-Module.



70  
Keep the model squeezed a bit to facilitate the process.

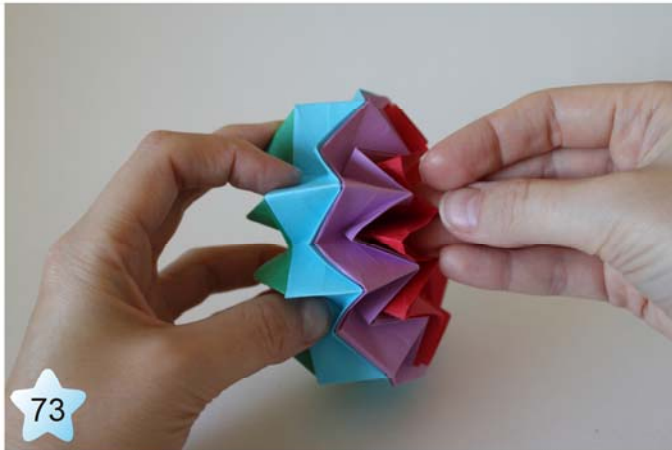


71  
This should be the result. Now all the double sections are locked and the layers of the 1st Ring-Module are placed atop the double cornice-like folds of the 6th Ring-Module.

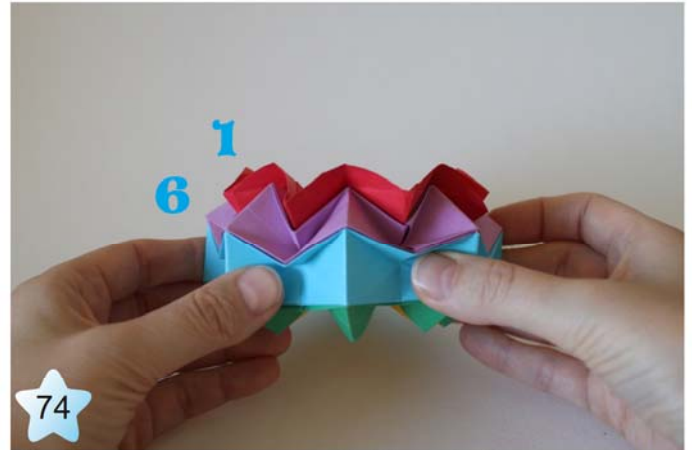


72  
Keeping the model squeezed a bit, consistently compress the folds between the double sections from outside to secure them more.

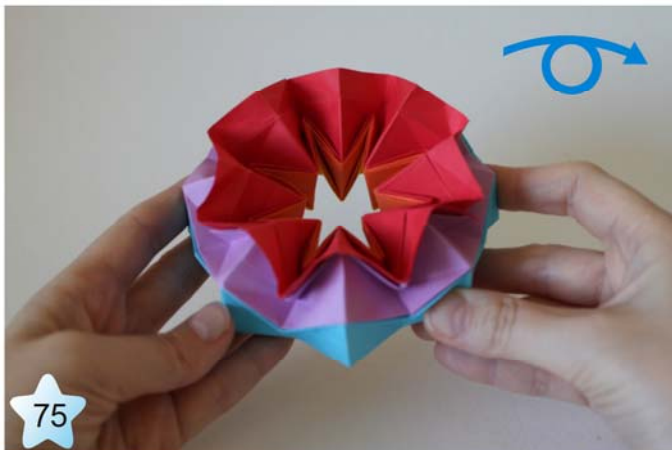




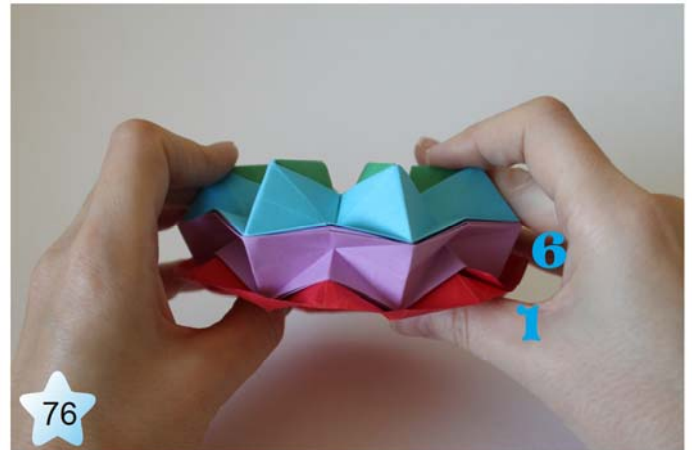
This should be the result. Now squeeze the model to the centre, thereby securing the folds, and then loosen it.



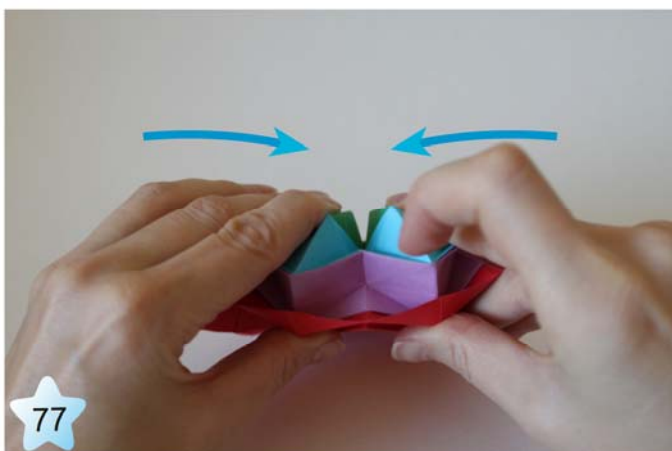
This should be the result. Now, let's connect the 6th Ring-Module and the 1st Ring-Module together.



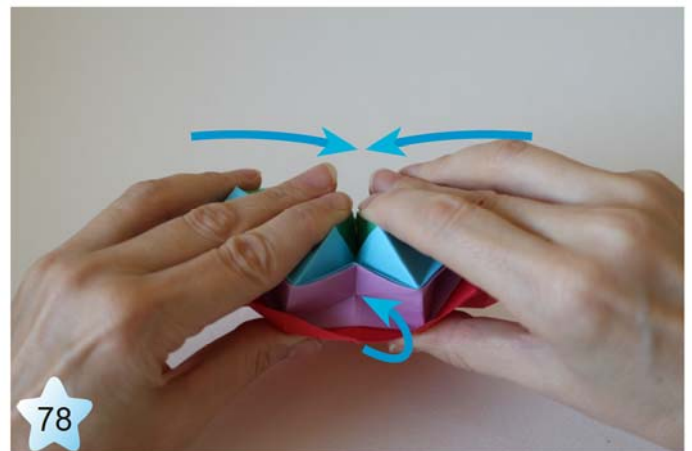
Turn the model over, so that the 1st Ring-Module positioned on the bottom as shown in the next step.



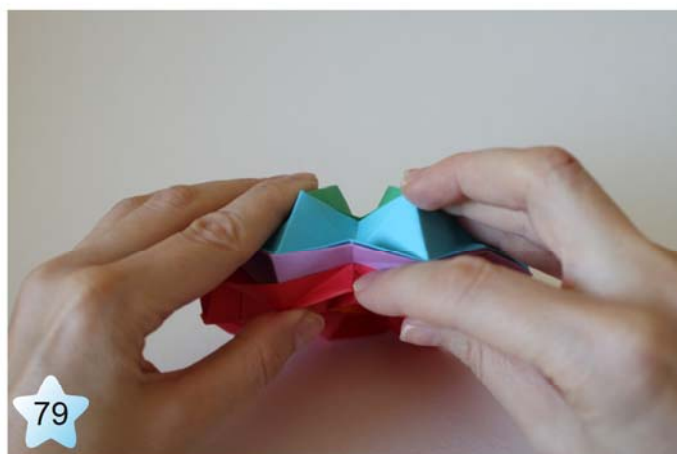
Rotate the model into the centre a bit, so that the 6th Ring-Module positioned along the equator as shown.



Working with one double section, compress the top corners a bit into the position shown in the next step.



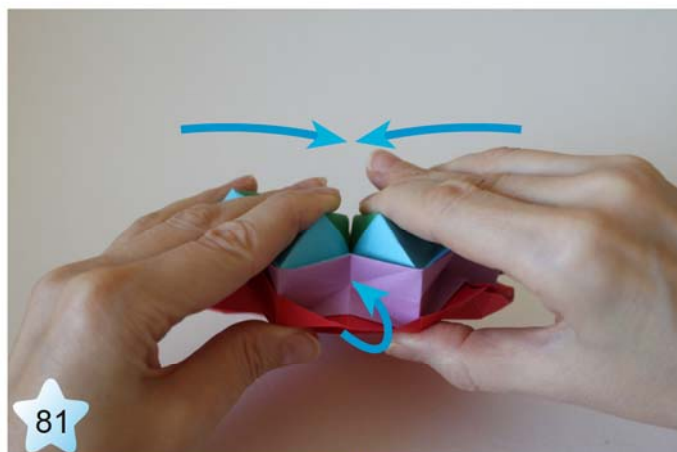
Keeping the top corners squeezed, fold the edge of the 1st Ring-Module atop the cornice-like fold of the 6th Ring-Module. Don't forget that you can lean the model against the table to facilitate the process.



Be sure that all folds are aligned and the edge of the 1st Ring-Module covers the cornice-like fold of the 6th Ring-Module.



This should be the result. Now turn the model around to work with the next double section.



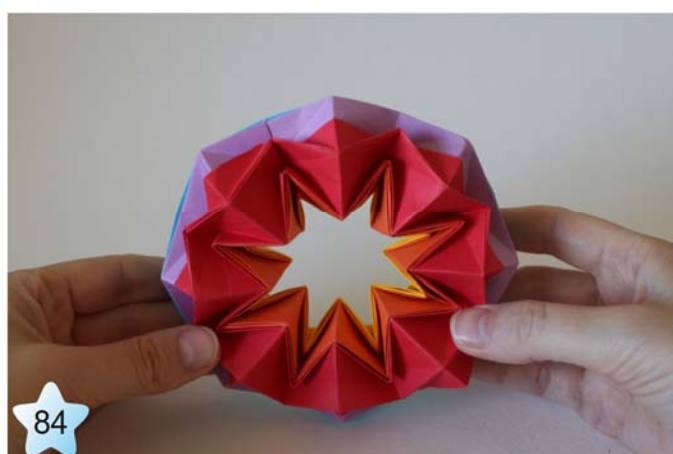
Repeat steps 77 to 80 with each double section, compress the top corners a bit and folding the edge of the 1st Ring-Module atop the cornice-like fold of the 6th Ring-Module.



Be sure that all folds are aligned and the edge of the 1st Ring-Module covers the cornice-like folds of the 6th Ring-Module.

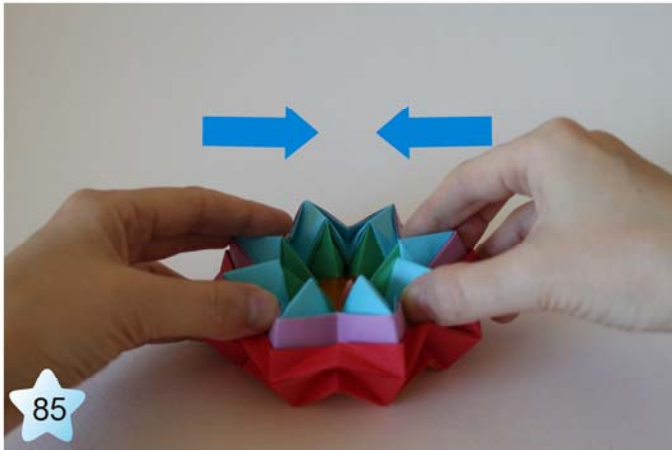


This should be the result. The edge of the 1st Ring-Module covers the cornice-like folds of the 6th Ring-Module all over.



Here is the back view of the model. Now when all the layers are aligned we will lock the 1st Ring-Module and the 6th Ring-Module together.

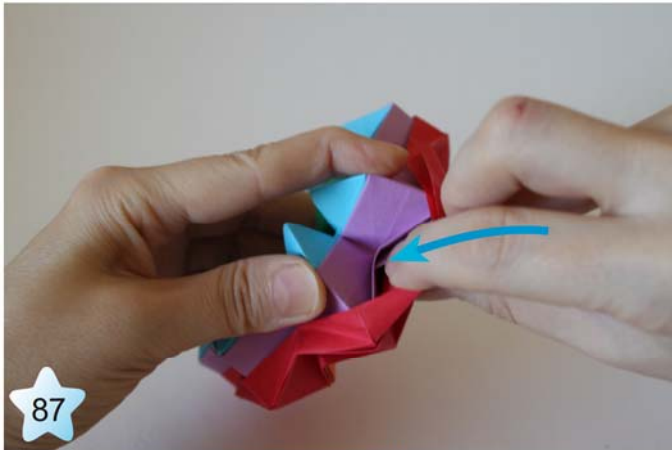




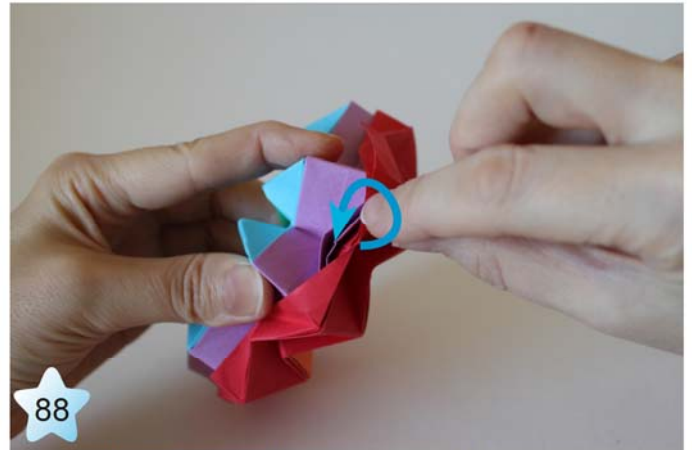
85 Place the model on a flat surface, so that the 1st Ring-Module positioned on the bottom as shown. Now squeeze the model to the centre.



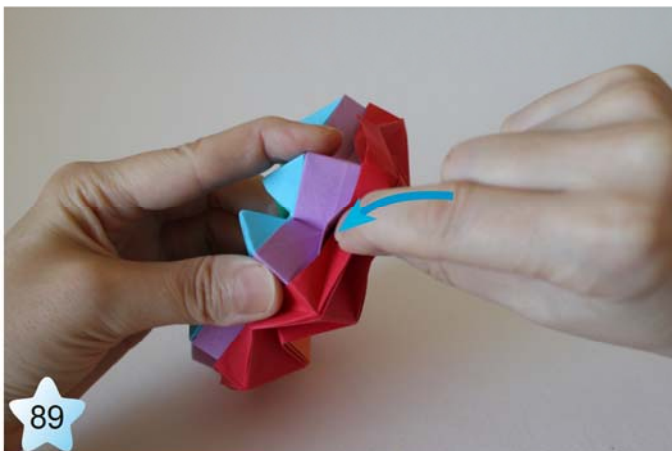
86 Keeping the top of the model squeezed a bit and working with one double section, open the flap of the 1st Ring-Module.



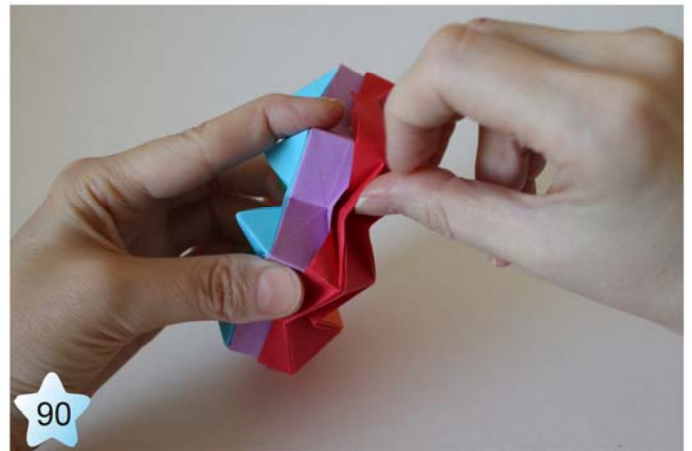
87 Continue to keep the top of the model squeezed, separate the layers of the double cornice-like fold of the 6th Ring-Module as shown.



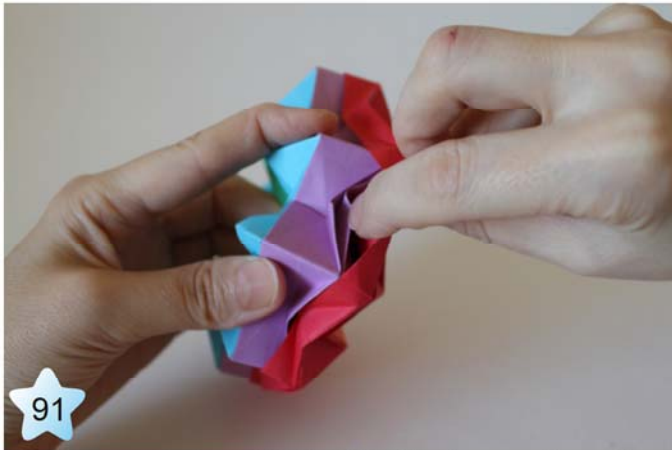
88 Direct the flap of the 1st Ring-Module into the separated layers of the double cornice-like fold of the 6th Ring-Module as shown.



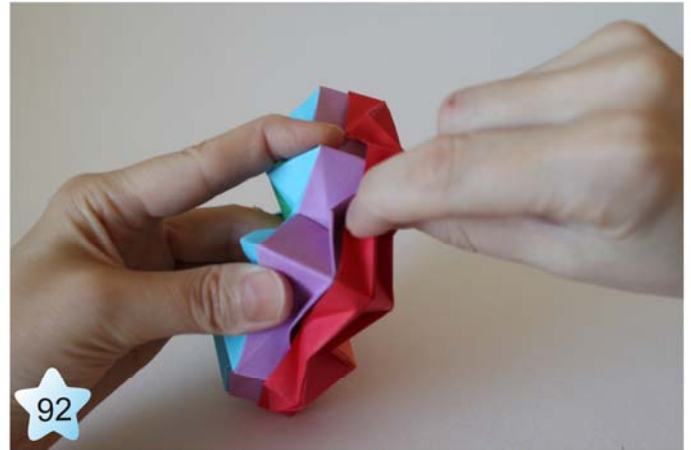
89 Insert the centre of the flap of the 1st Ring-Module into the separated layers as shown.



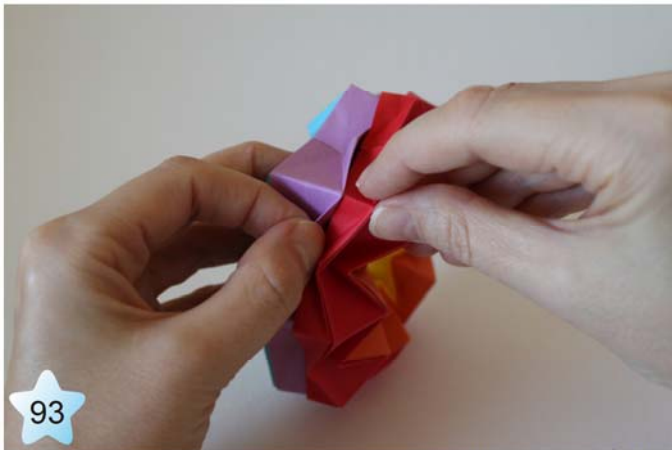
90 This should be the result. Note, that the centre of the flap of the 1st Ring-Module inserted completely while the sides of the flap are still atop the 6th Ring-Module.



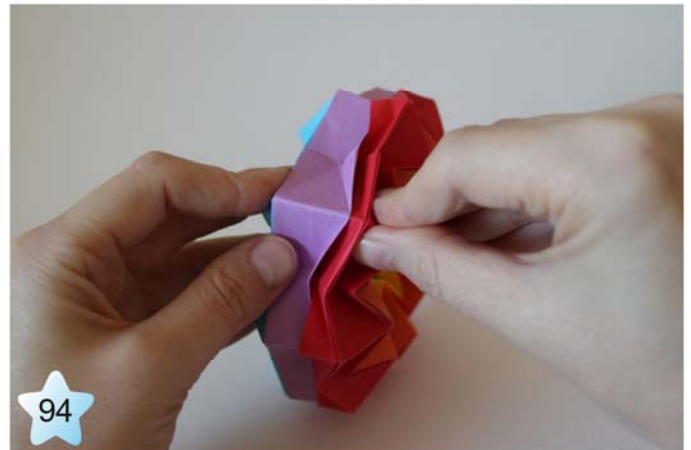
Now repeat steps 86 to 90 with the next section, inserting the flap of the 1st Ring-Module into the separated layers of the double cornice-like fold of the 6th Ring-Module.



This should be the result. Note, that the flaps are inserted into the pockets only by their centre points; the corner between them are free and atop of the 6th Ring-Module.



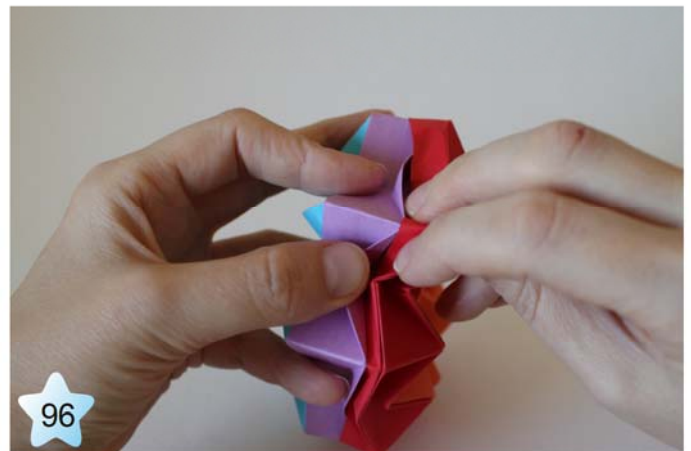
Now opening slightly the cornice-like fold of the 6th Ring-Module as shown, insert half-way the corner of the 1st Ring-Module under the folds as shown.



This should be the result. The 2 flaps of the 1st Ring-Module and the corner between them are inserted into the 6th Ring-Module. Keep it inserted half-way until all the sections are done.

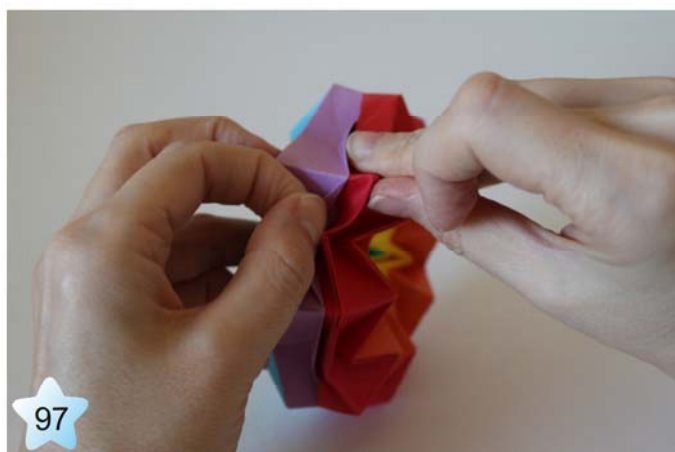


Repeat steps 86 to 90 with the next section, inserting the flap of the 1st Ring-Module into the separated layers of the double cornice-like fold of the 6th Ring-Module.

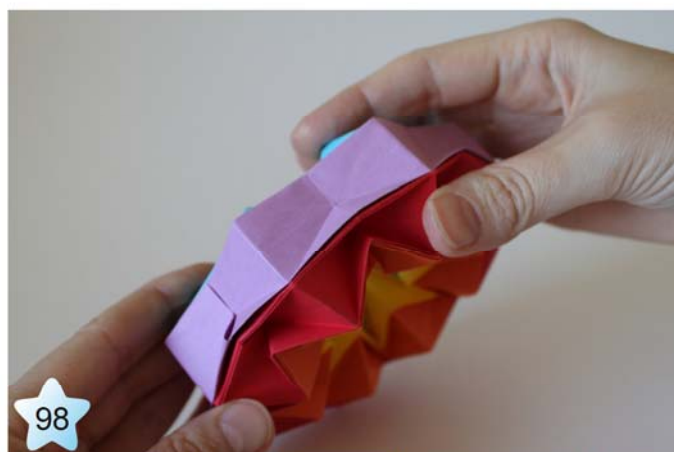


When the neighboring flaps are inserted into the pockets by their centre points, insert half-way the corner of the 1st Ring-Module under the folds as shown.

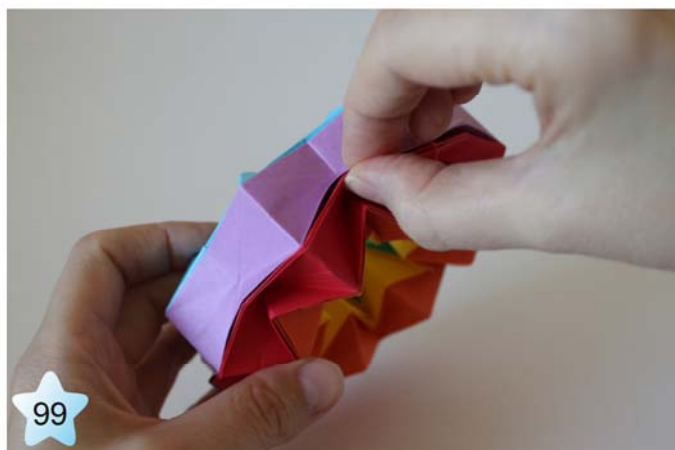




97  
Consistently continue insert the edge of the 1st Ring-Module into the separated layers of the 6th Ring-Module section by section. Keep the edge inserted half-way until all the sections are done.



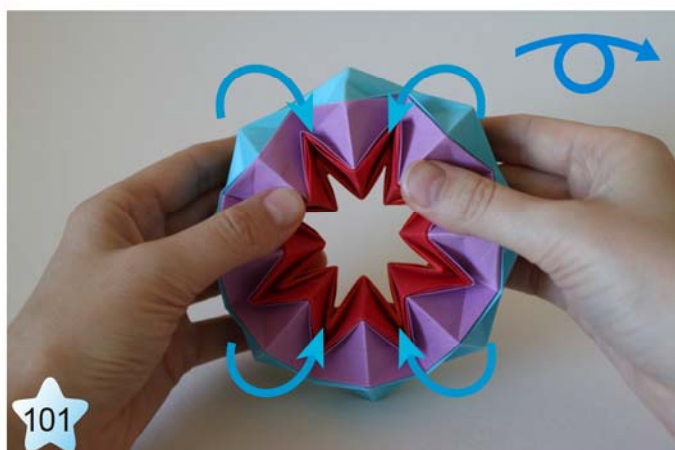
98  
As soon as all the edge of the 1st Ring-Module is inserted half-way, gently insert it further as far as it will go.



99  
Working consistently with each section, accurately pinch all the layers together to form the cornice-like fold and thereby locking the 6th Ring-Module and the 1st Ring-Module together. All the internal layers should accurately coincide.



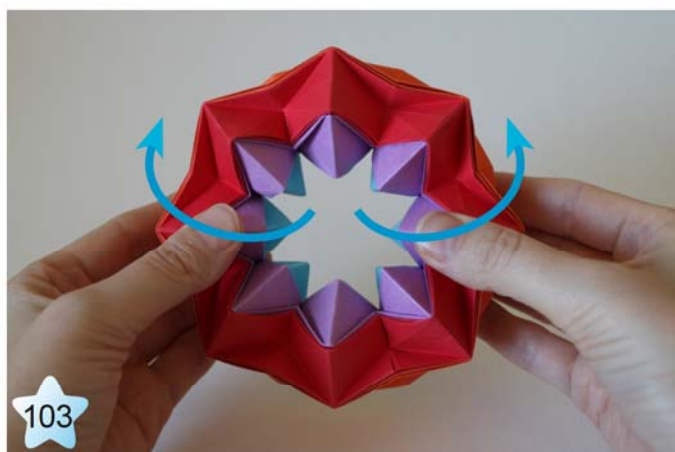
100  
Rotate the model inside a bit, so that the connection of the 6th and 1st Ring-Modules is moving closer to the centre. This way we are securing the folds step-by-step.



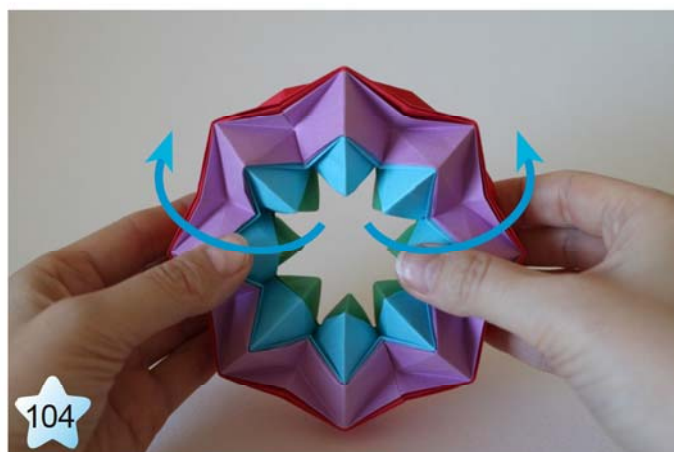
101  
Continue to rotate the model inside a bit further, so that the connection of the 6th and 1st Ring-Modules is moving into the centre. Then, turn the model over.



102  
Now, gently rotate the model from inside to outside, so that the Ring-Modules are moving from the centre.



Continue to rotate the model from inside to outside, so the next Ring-Module is appearing from the centre.



And rotate some more so that the connection of the 1st and 6th Ring-Modules is near the centre again.



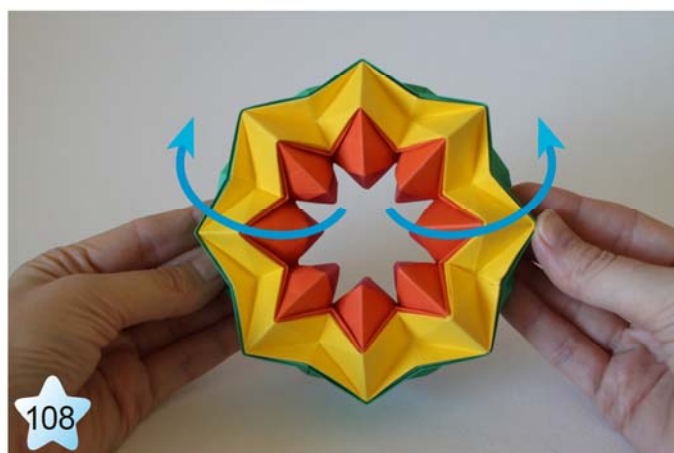
Now squeeze the model to the centre, thereby securing the folds.



Keeping the model squeezed a bit, consistently compress the folds of each section along the one Ring-Module to secure the folds. Then, rotate the model some more to work with the next Ring-Module.

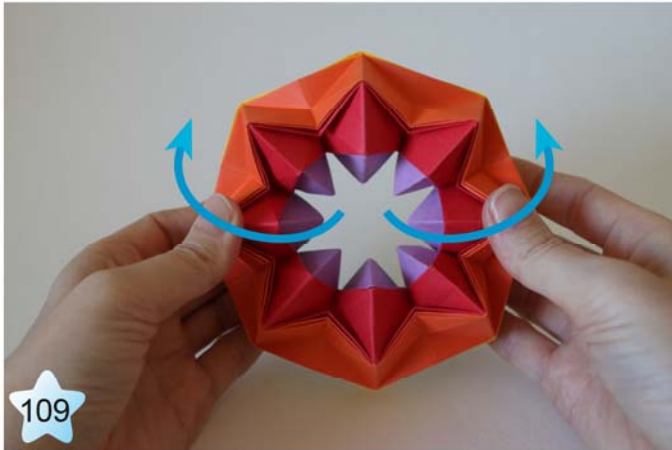


Repeat steps 105 and 106 consistently for each Ring-Module, thereby securing the folds. Remember to keep the model squeezed a bit and compress the folds only from the front side of the star.



This should be the result. Now rotating should go much smoother.





Rotate the model some more from inside to outside, so the next Ring-Module is appearing from the centre.



If rotating is still not smooth enough, repeat steps 105 to 107, squeezing the model to the centre and consistently compressing the folds of each section on each Ring-Module. Compress the folds only from the front side of the star!



Then test the model again and rotate the star some more. If needed repeat the squeezing steps one more time.



Here is the completed Multi-piece Magic Star!!!



Congratulation!!! You folded the fantastic Oriland Magic Star!

When the star is rotated, the changing pattern of folds and colours produce a mesmerizing effect!  
Enjoy this amazing action model and experience the mystery of Oriland Magic Star yourself!



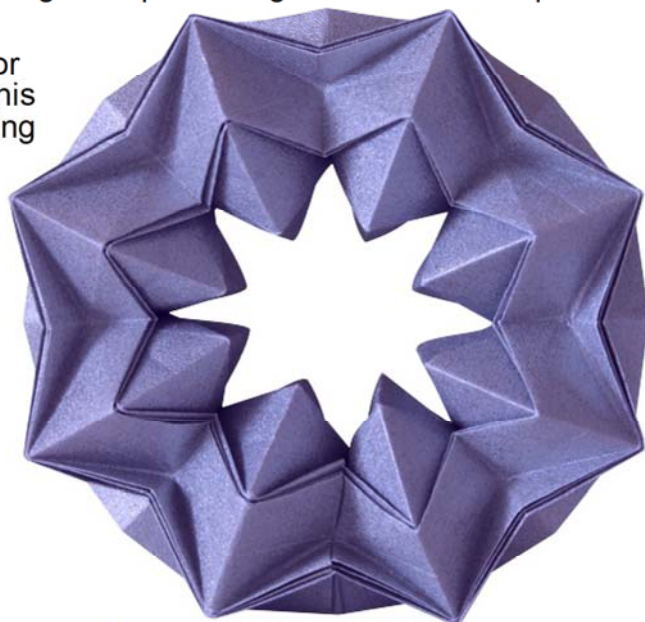
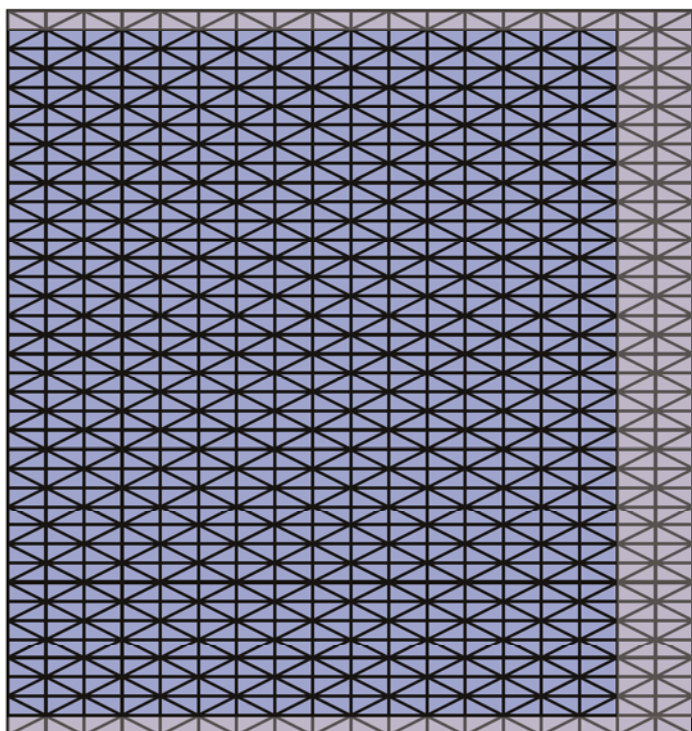


# One-Piece Magic Star

by Yuri Shumakov

The one-piece Magic Star has 8 points, folds from one rectangle (18:19 in proportion) and connects with the overlapped method without any glue. This is rather complex model, given the unsymmetrical size of paper, the folding process and assembly, so before you challenge yourself with this one-piece Magic Star, we would strongly recommend folding multi-piece Magic Star first to comprehend the folding and most importantly assembly.

Suggested size: Take a large rectangle of paper, for instance 18 x 19 inches (45x47.5 cm) in size, in this case the diameter of the finished star will be measuring 5 inches (12.5 cm).

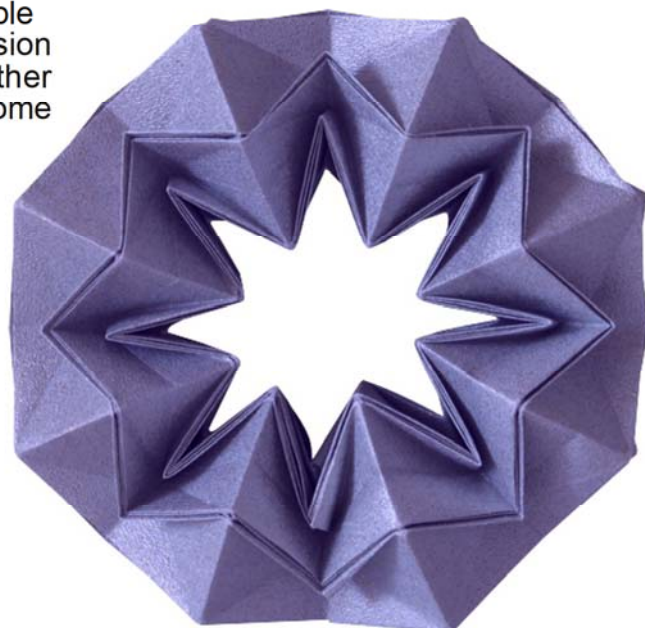


The pallid areas on the crease pattern indicate the parts of paper that will be overlapped and hidden on the finished star.



The diameter of the finished one-piece Magic Star will be measuring about on 5/18 of the short side of the initial rectangle, as pictured.

Suggested paper: Paper should be strong and flexible with tensile strength, as there will be a certain tension during the assembly of the star and during its further rotation. It can be art papers, craft paper etc that come in big sheets.



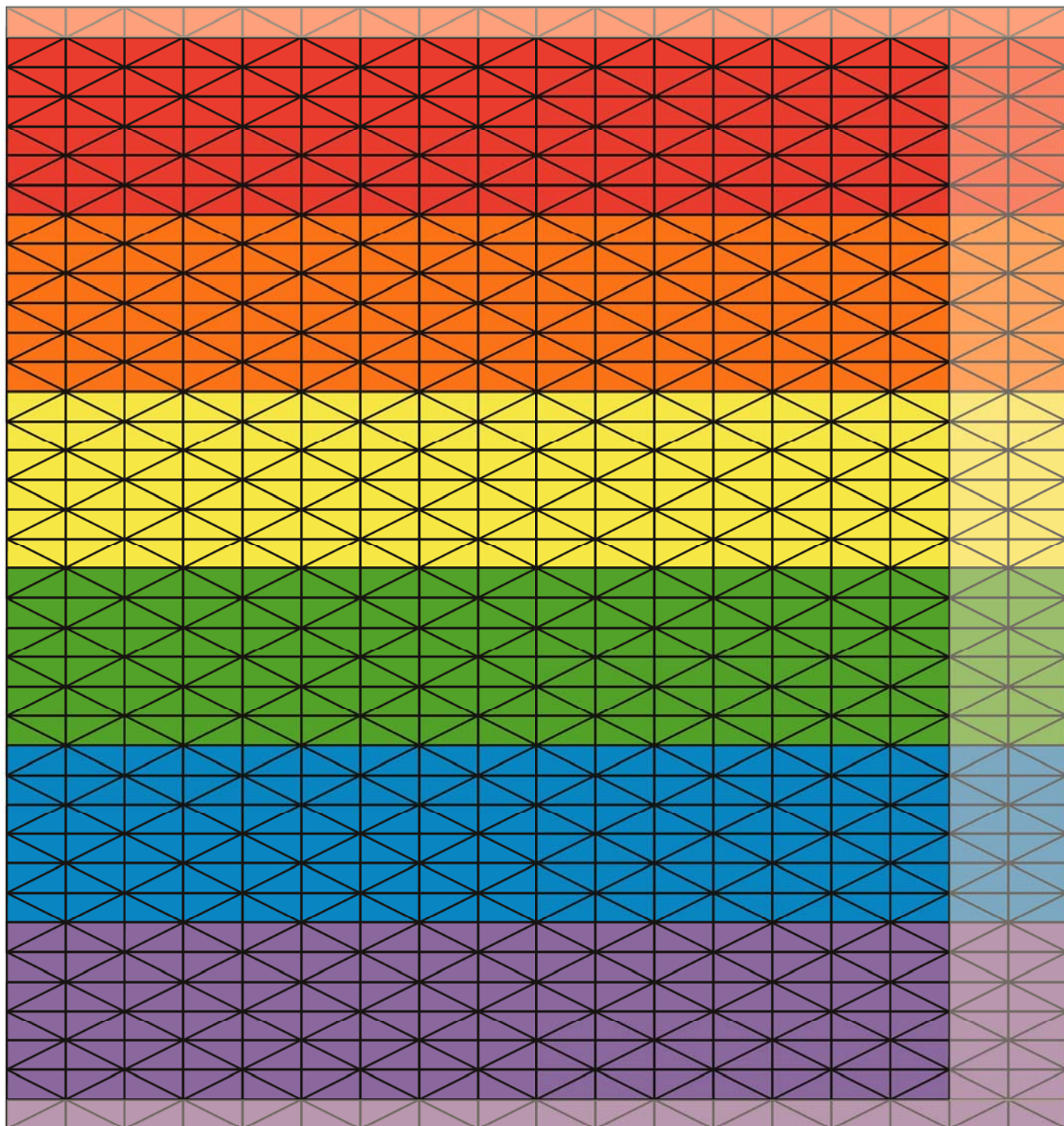


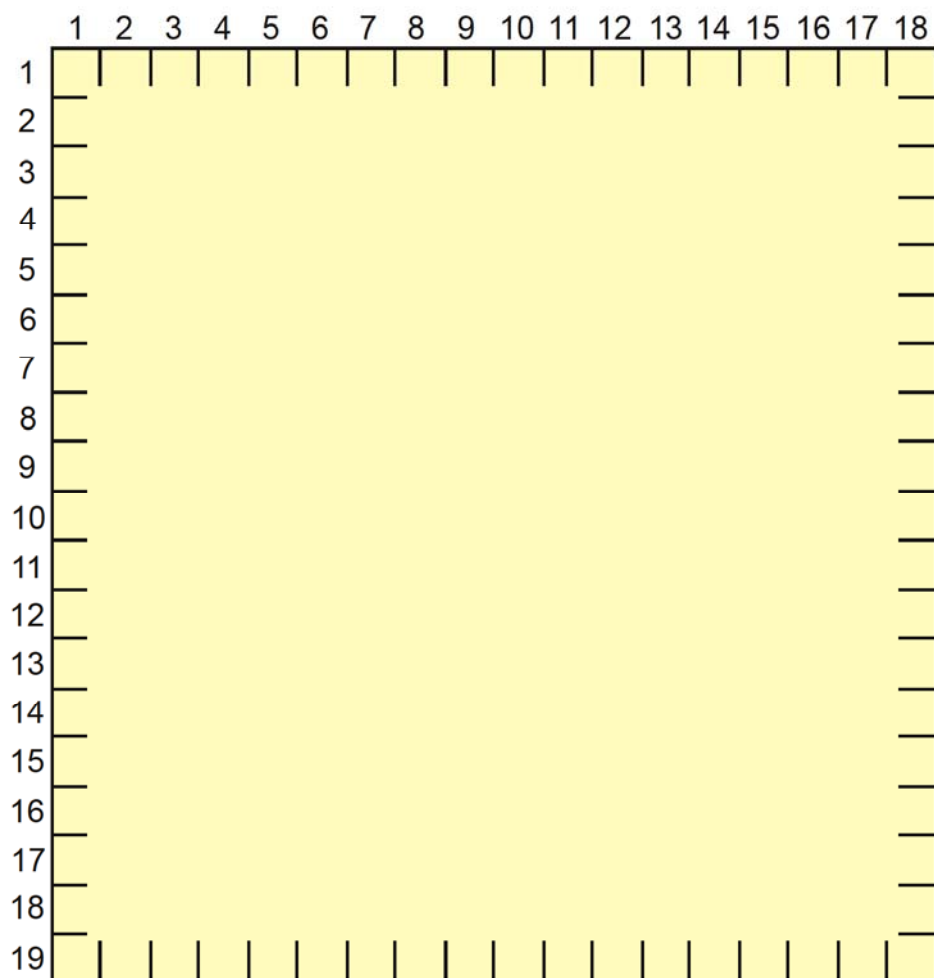


Suggested colours: Since just one piece of paper is used for this model, it can be any colour you wish. But when you master the model you may try to colour the paper in a specific pattern to receive the rainbow effect of changing colour rings on this star. Alternatively, you may fold the star first and then colour its rings into desired colours.

Below is the crease pattern with coloured strips that will appear on the folded model as the coloured rings similar to what is achieved in a multi-piece Magic Star with using separate colour strips.

The pallid areas on the crease pattern indicate the parts of paper that will be overlapped and hidden on the finished star.





If using two-color paper, begin with coloured side down.

1

Place the rectangle as shown. With a help of a ruler, make appropriate marks by a pencil on edges, dividing the short side at 18 sections and the long side at 19.

If you followed the advice on paper size and took a rectangle, 18 x 19 inches (45x47.5 cm) in size, in this case each section will be 1 inch (2.5 cm).

2

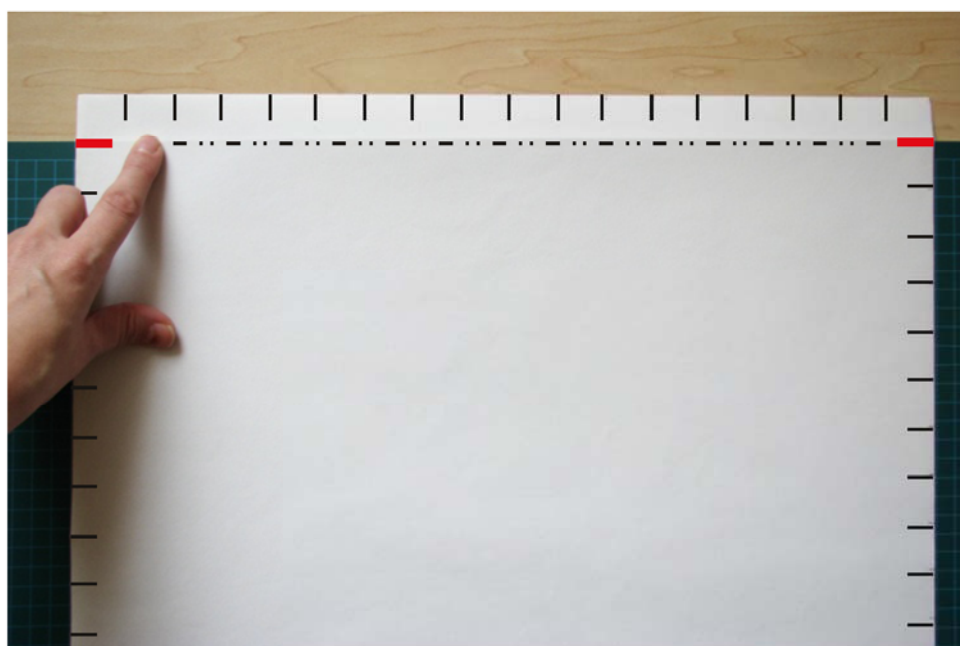
When working with large sheets, it's convenient to make folds over the edge of a folding/cutting mat, which would be ideal, or over something similar like an edge of a long ruler ect. embossing this edge on the paper.

Now we need to make a fold through the appropriate marks; the upper side marks to be exact.

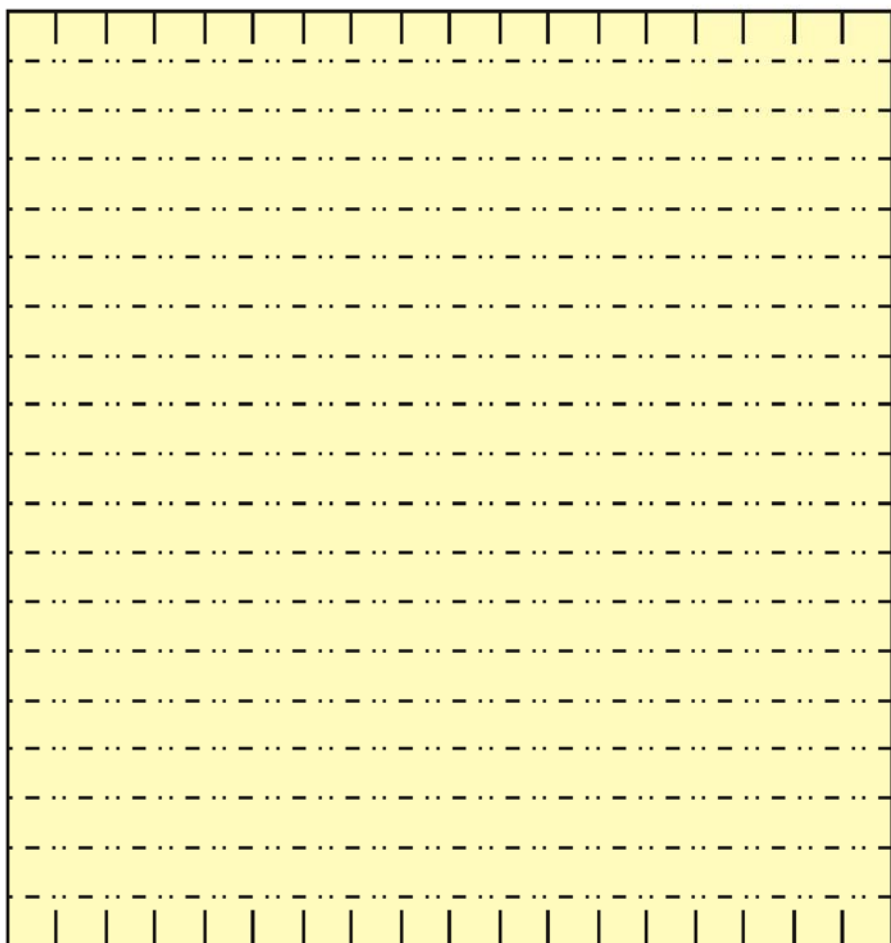
Place the upper marks exactly on one line with the edge of the mat as shown.

Then, holding the paper in this position (usually the surface of the folding/cutting mat will keep the paper in place), make a mountain fold through the edge of the mat, embossing this edge on the paper.

When you embossed the fold-line, then you can make a real crease. Press the fold flat and unfold it.



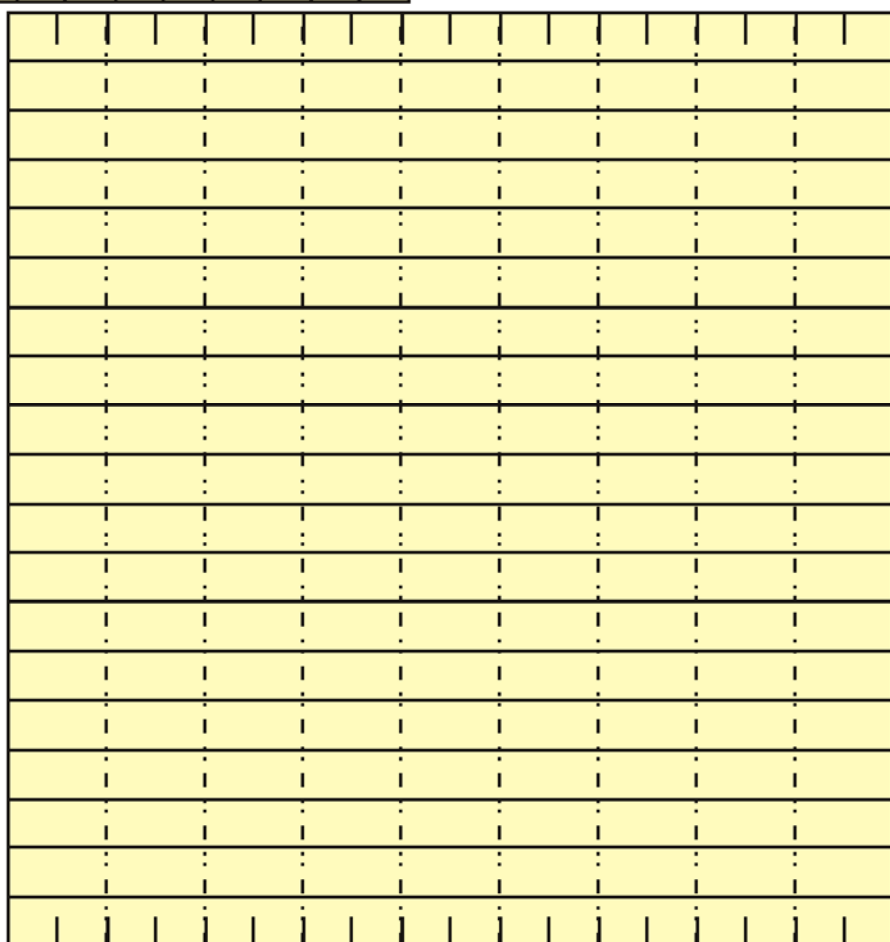


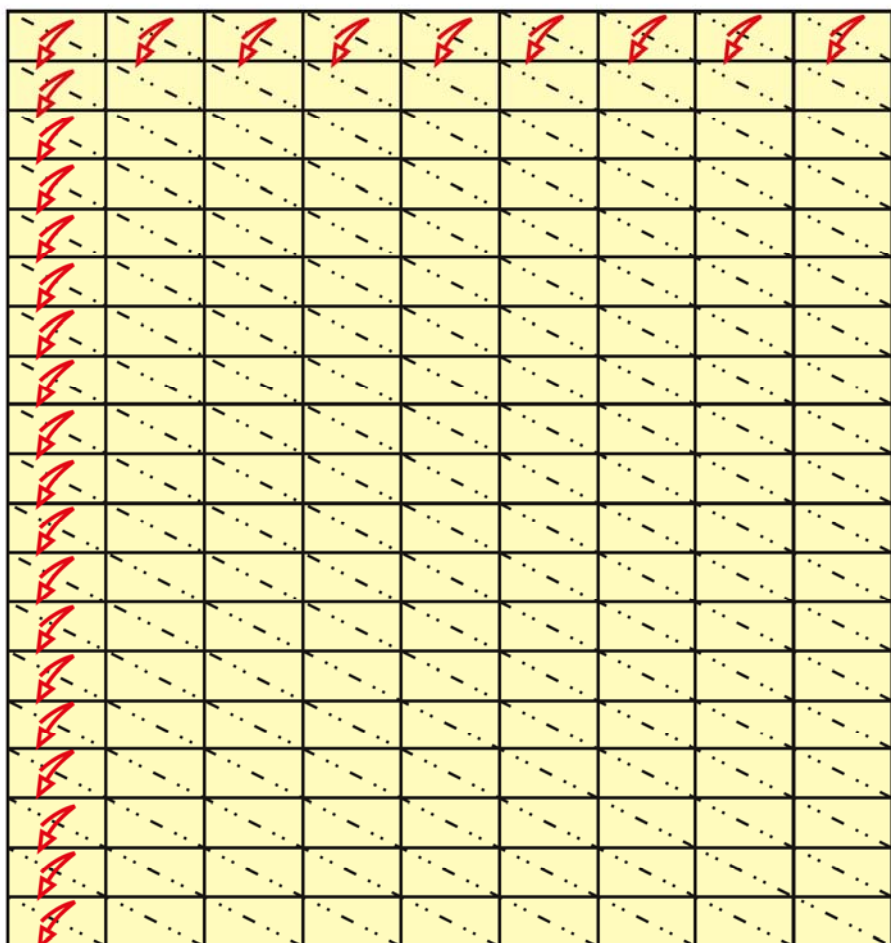


Using the same technique as shown in step 2, make mountain folds through the appropriate side marks, thereby dividing the rectangle into 19 horizontal equal sections.



Again using the same technique as shown in step 2, make mountain folds through the appropriate side marks, thereby dividing the rectangle into 9 vertical equal sections.



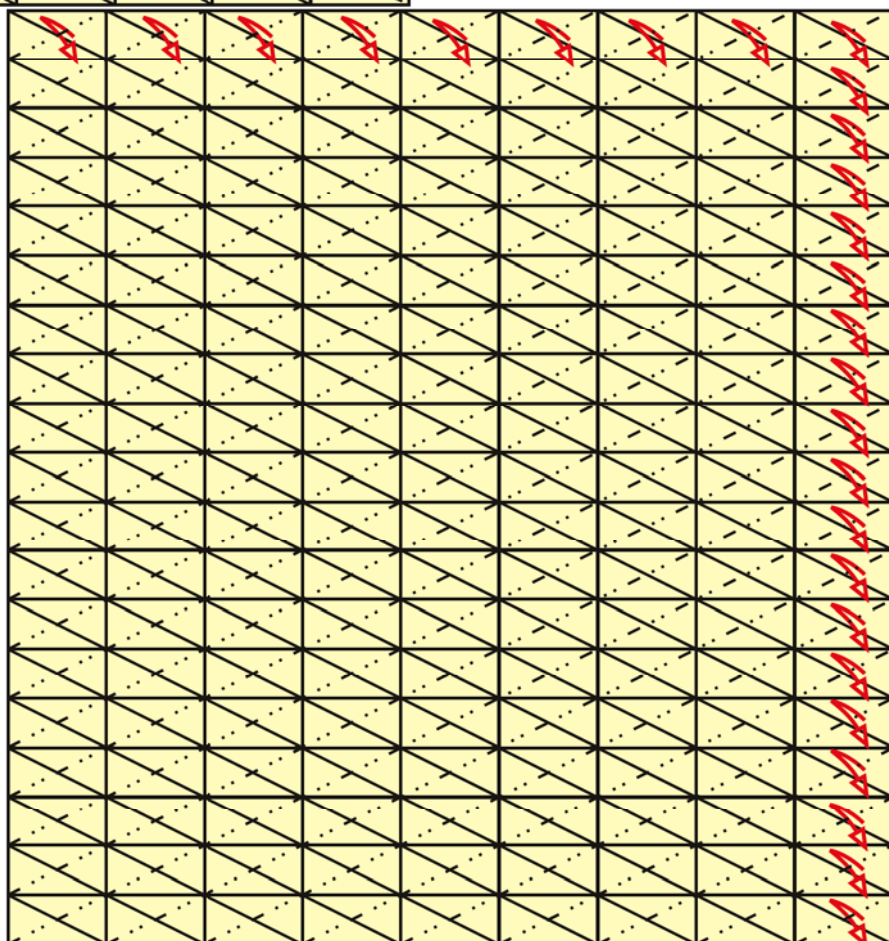


5

Working in one direction, make the diagonal fold-line over each rectangle by 'mountain' folding. It's comfortable to make these diagonals 'on hands' i.e. on each rectangle pinch the corners planning the diagonal and then make the 'mountain' fold between these points.

6

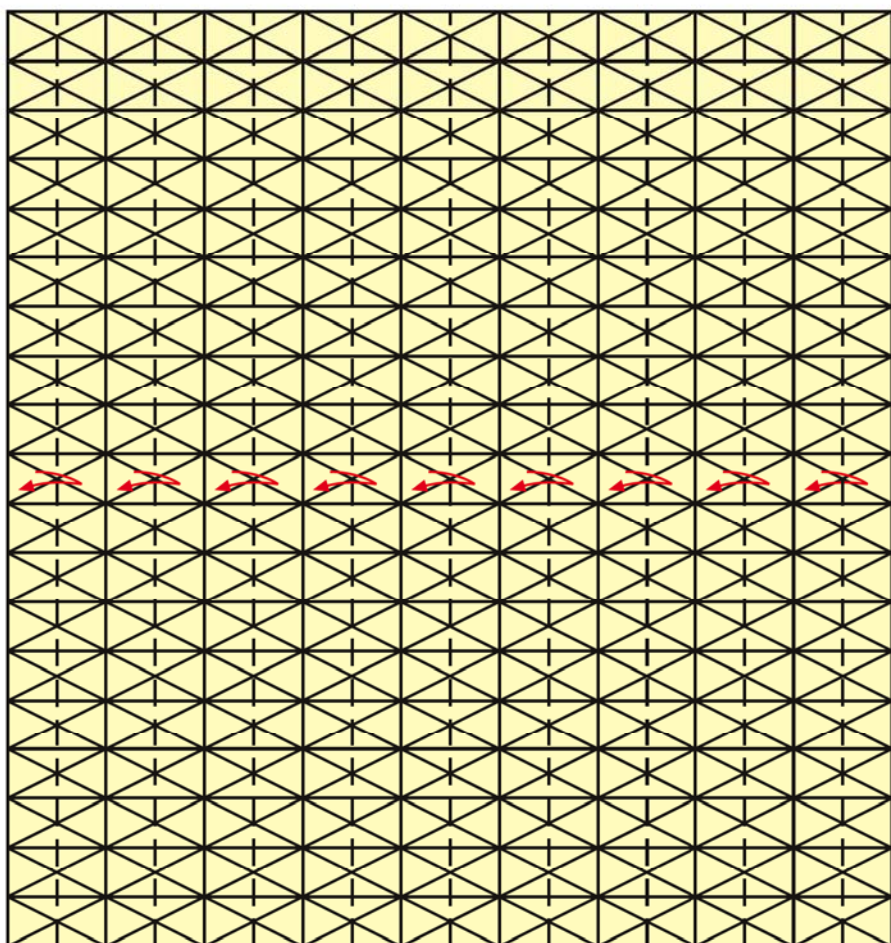
Now working in another direction, make the second diagonal fold-line over each rectangle, as shown.





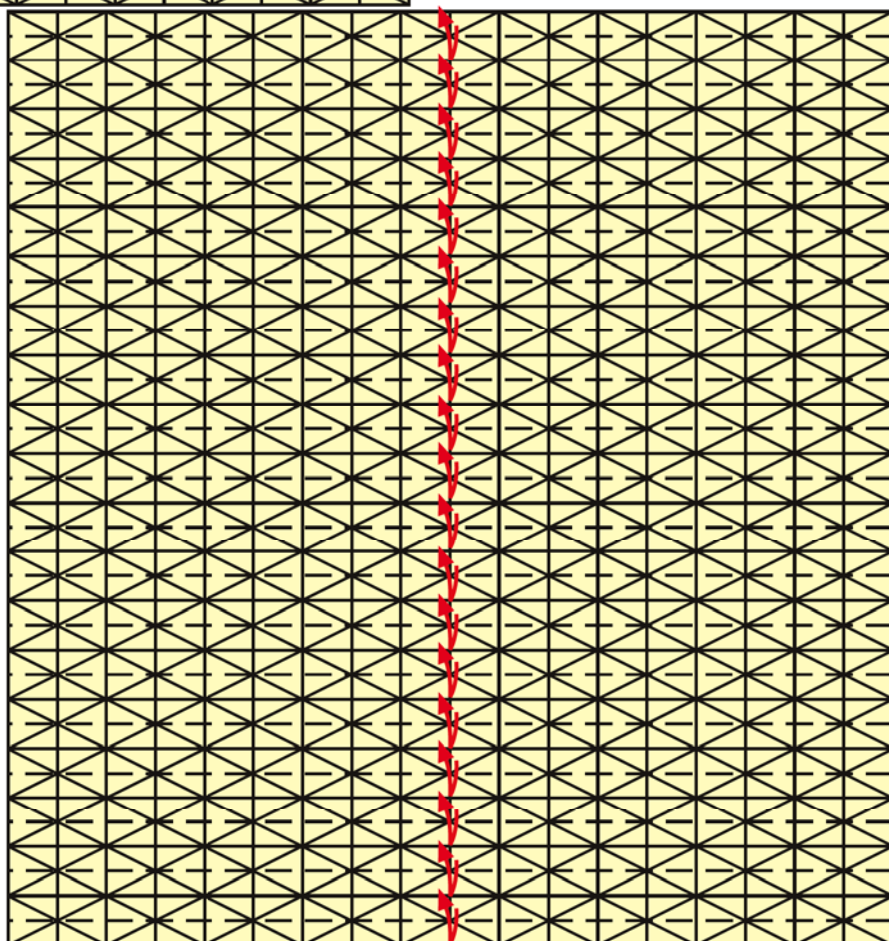
7

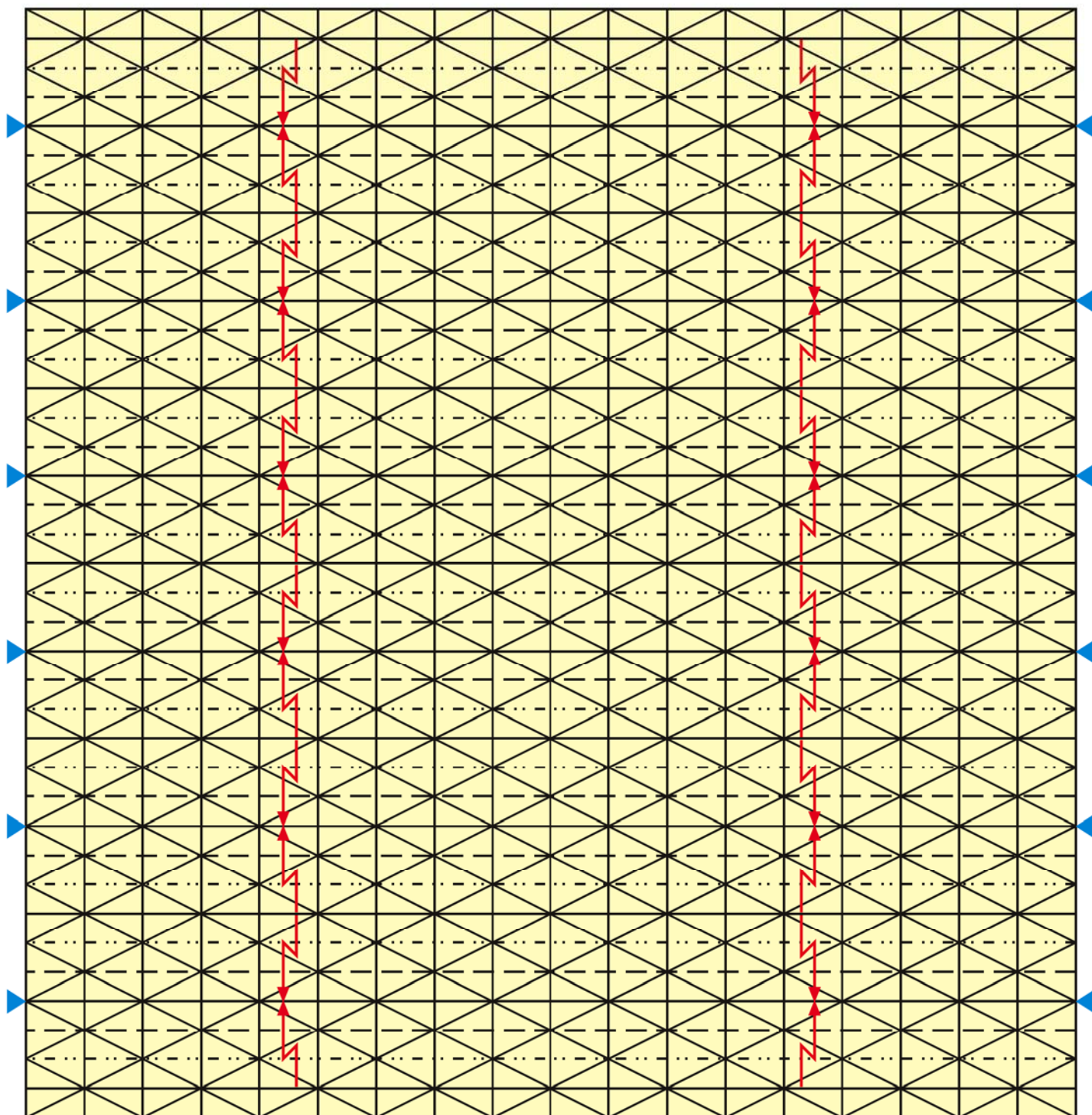
Valley fold and unfold each vertical section in half, thereby dividing the rectangle in 18 vertical equal sections.



8

Valley fold and unfold each horizontal section in half, thereby dividing the rectangle in 38 horizontal equal sections.



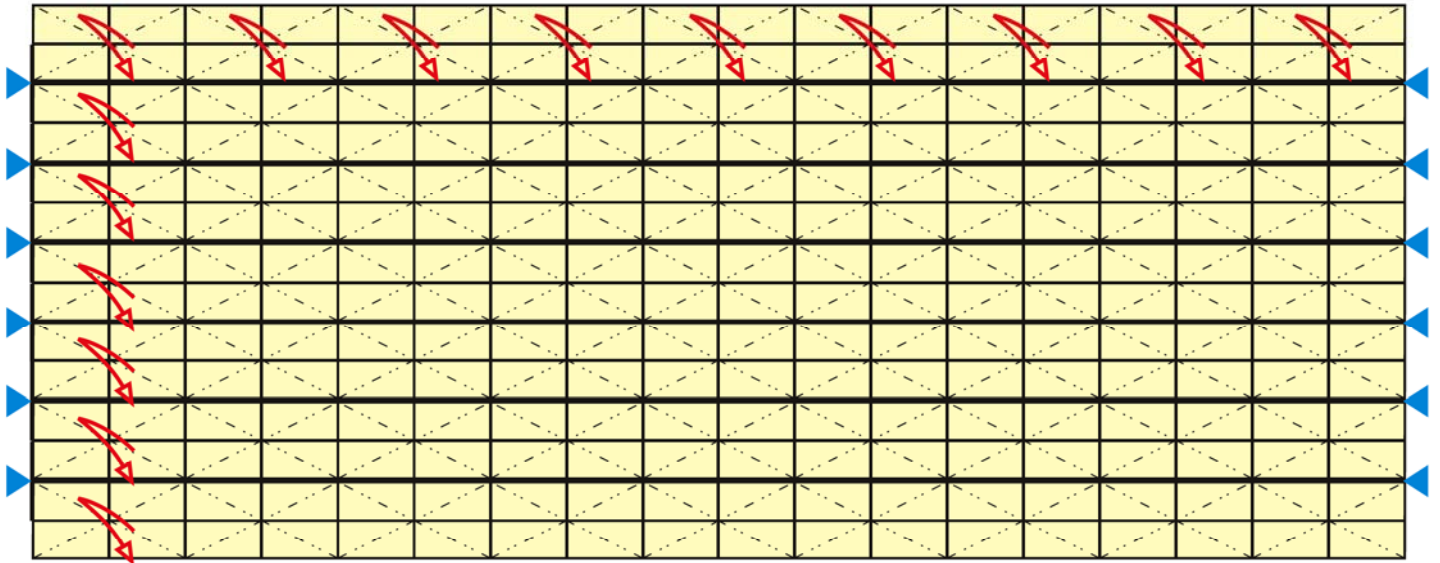


9

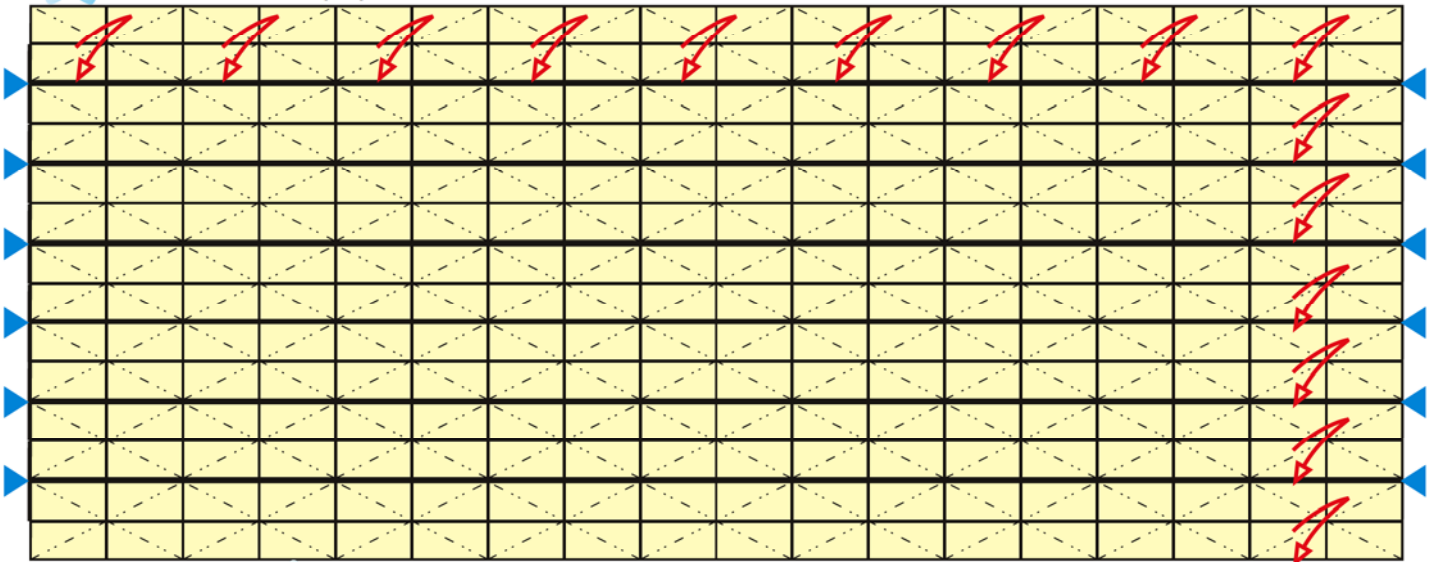
This should be the result. Find the side marks on your paper as shown; make small marks by a pencil on your sheet. Double step fold the paper to these marks as indicated.



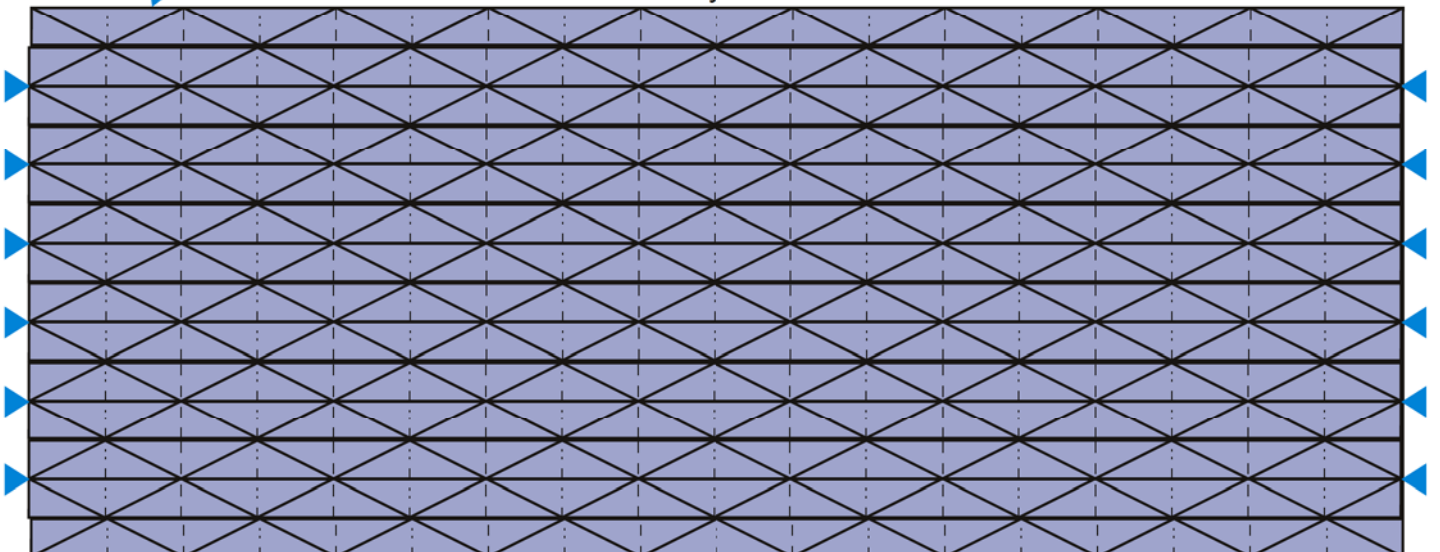
10 Working with all the layers, re-fold the 'mountain' folds in one direction.

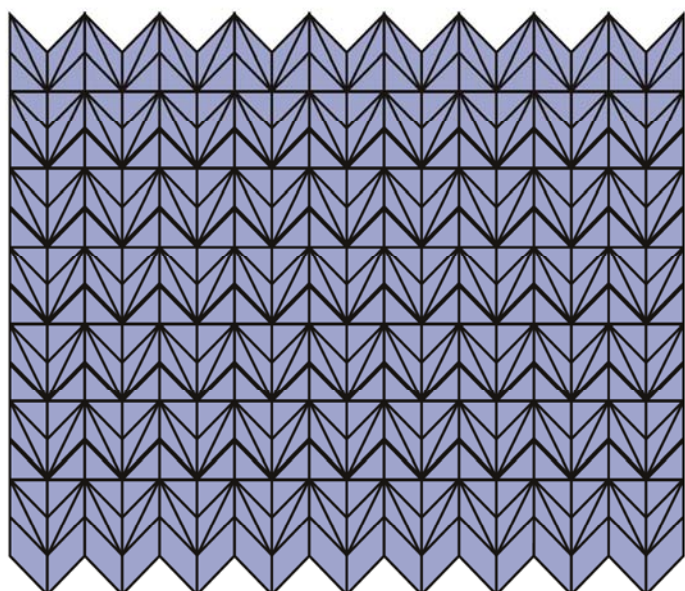


11 Continue working with all the layers and re-fold the 'mountain' folds in another direction. Then turn the paper over.



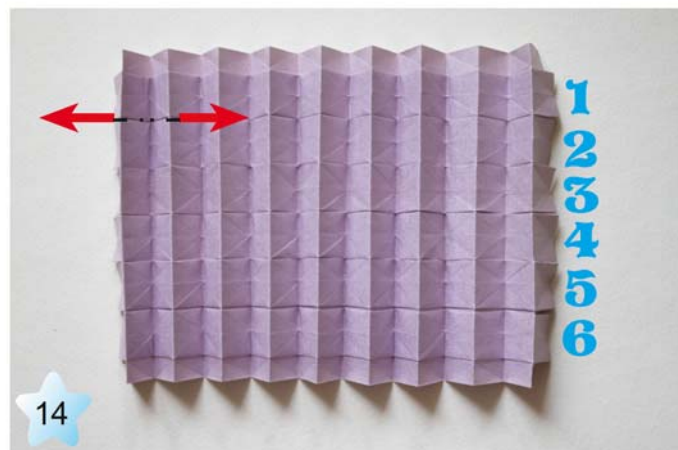
12 Along the existing vertical fold-lines, fold the strip by 'mountains' and 'valleys' like an accordion.



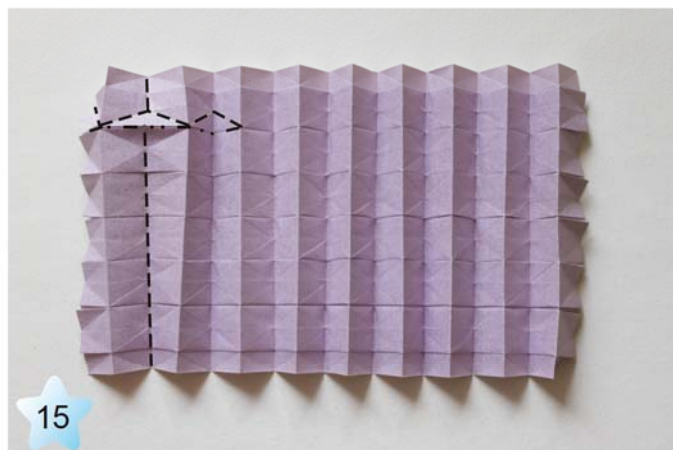


13 This should be the result. Press the folds together and then release them.

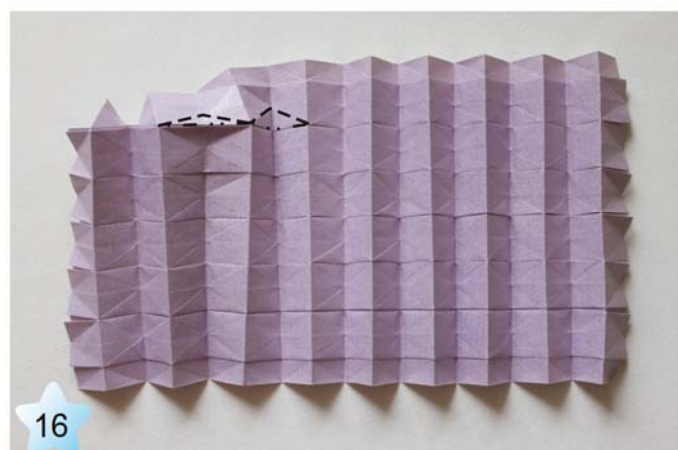
- 1 We have formed the 6 horizontal sections that will work similarly to 6 strips of the multi-piece Magic Star. Each strip in the multi-piece Magic Star was connected into a Ring-Module and similarly to it, here we will connect the whole piece of paper with these 6 horizontal strip-sections into the cylinder with all the 6 Ring-Modules in-built into it.
- 2
- 3
- 4
- 5 But before connecting the paper into the cylinder we will shape the folds of each of these 6 horizontal strip-sections into the position needed for the assembly of the star. After the strip-sections are formed, we'll unfold them and connect the piece into the cylinder and then assemble it into the star.
- 6



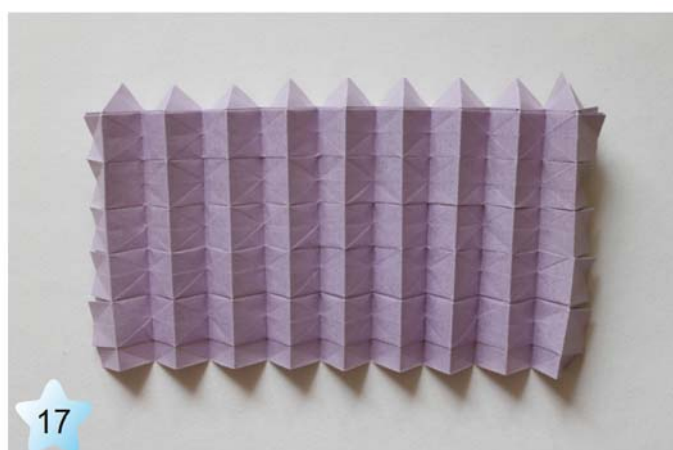
Now we will shape the cornice-like folds along the borders of the sections. Starting with the first horizontal strip-section, stretch the double section and pinch the fold-line between the 1st and 2nd horizontal strip-sections into a mountain fold.



This should be the result. Along the existing fold-lines, shape the cornice-like fold as shown and valley fold this vertical double section, thereby securing the folds. Then, continue to shape the cornice-like fold on the next double section.



Consistently shape the cornice-like folds on each next double section along this 1st horizontal strip-section.

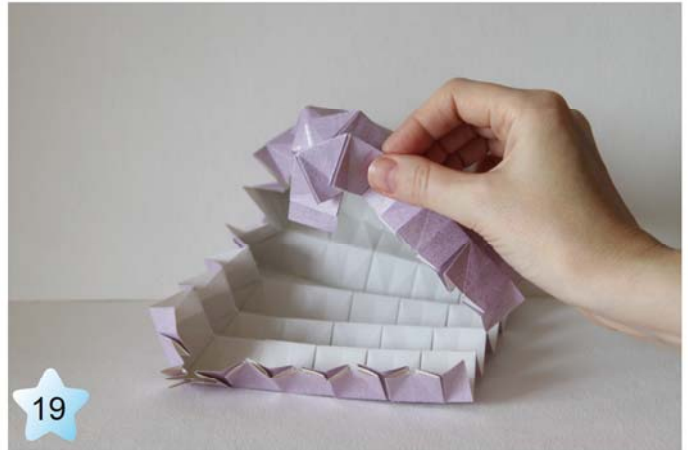


This should be the result. The 1st horizontal strip-section is formed.





18  
This should be the result. Now consistently shape the cornice-like folds on each next double section along the 2nd horizontal strip-section.



19  
Note that the side folds are also shaped into the cornice-like fold (into a half of it to be exact).



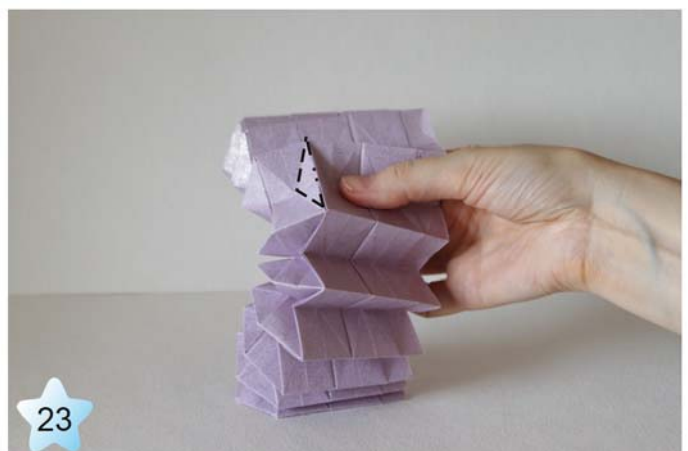
20  
While shaping the cornice-like folds, pleat the vertical sections of paper as shown in the next step.



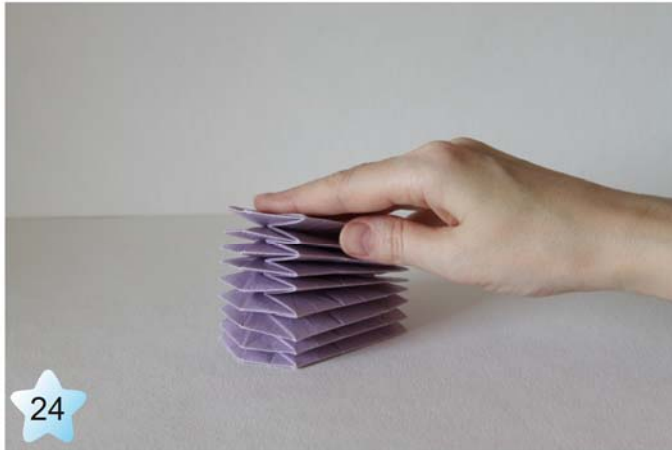
21  
This should be the result. This way you can compress all the folds securely. After compressing the folds, loose the paper and continue shape the cornice-like folds on the 3rd horizontal strip-section.



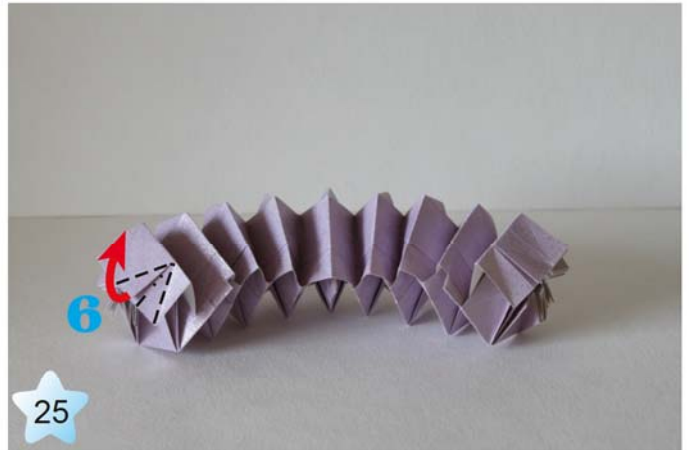
22  
Continue consistently to shape the cornice-like folds on each double section along the horizontal strip-section.



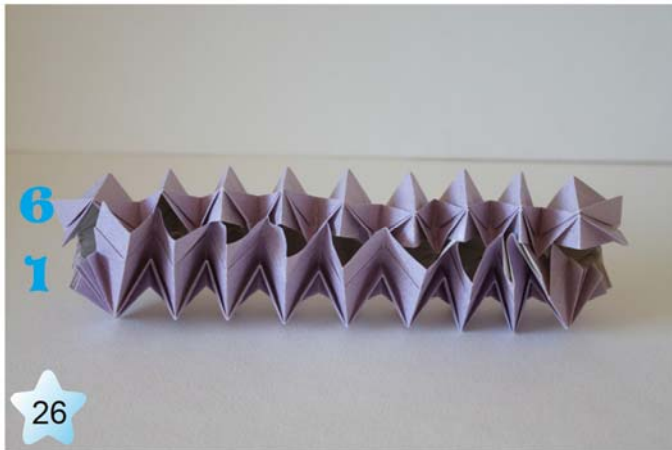
23  
Shape the cornice-like folds on the 4th horizontal strip-section. While shaping the cornice-like folds, you may lean the pleated vertical sections against the table.



24  
This should be the result. Compress all the folds securely and then loose the model. Shape the cornice-like folds on the 5th horizontal strip-section.



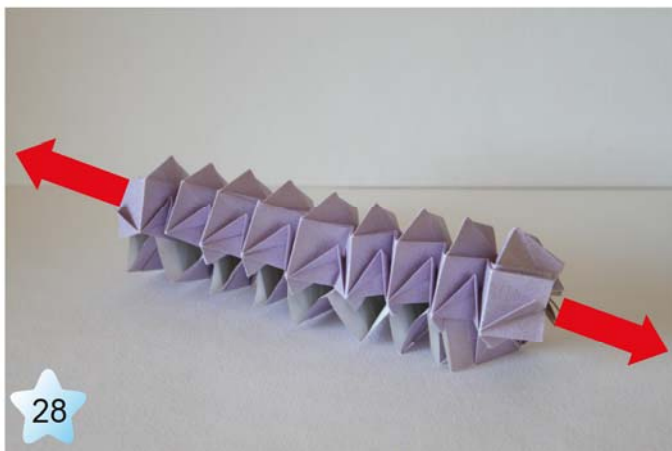
25  
Now only the 6th horizontal strip-section left to form. Similarly to the multi-piece Magic Star, where the last Ring-Module is special, this strip-section is also special. See diagrams of the last Ring-Module (page 34) to shape the special folds.



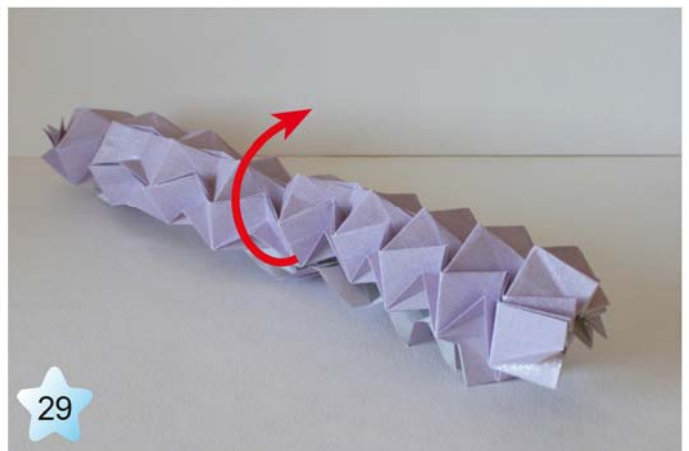
26  
This should be the result. Now all the horizontal strip-sections are properly formed and you see the edges of the 1st and 6th horizontal strip-sections.



27  
Compress all the folds securely and then loose the model.



28  
This should be the result. We shaped the folds of each of the 6 horizontal strip-sections into the position needed for the assembly of the star. Now we'll unfold them into the initial position; in order to do that, stretch the tube gently.

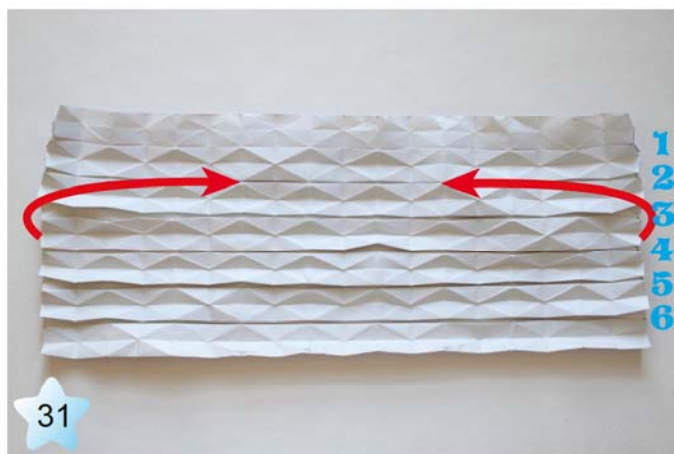


29  
This should be the result. Now unfold the 6 horizontal strip-sections into the position shown in the next step.

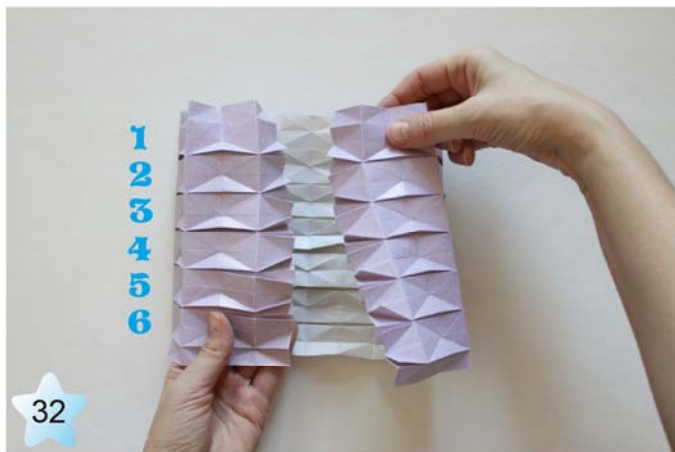




This should be the result. You may see that all the cornice-like folds on the 6 horizontal strip-sections are well shaped and it will facilitate considerably the assembly of the star. Now turn the paper over.



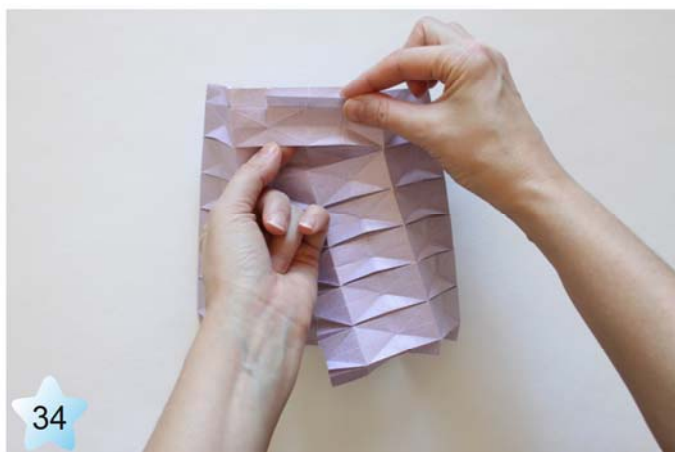
Now we'll connect the paper into an octagonal cylinder. Bring the right- and left-hand sides around and together.



This should be the result. Now 2 vertical sections of the right-hand end will overlap the 2 sections of the left-hand end as shown.



Starting from the 1st horizontal strip-section, insert the layers of the right-hand end into the double step-folds of the left-hand end.



Be sure that all the layers are coinciding.



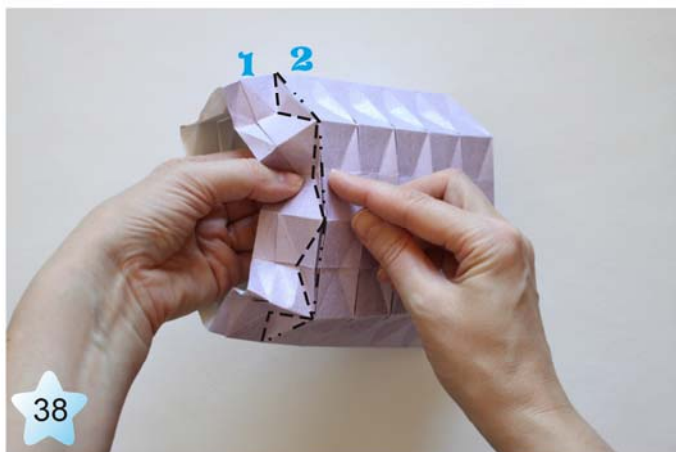
Consistently connect each next horizontal strip-section in the same way.



36  
This should be the result. The paper is connected into the octagonal cylinder by the overlapping method.



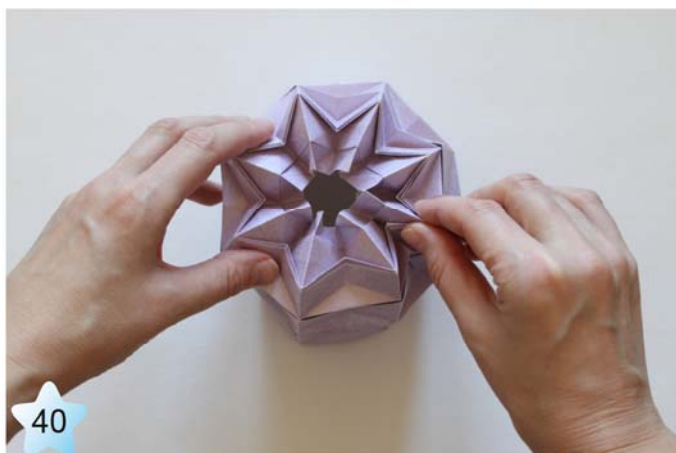
37  
Now starting from the 1st Ring-Section, along the existing fold-lines, we will consistently transform this octagonal cylinder into an approximated torus surface.



38  
Flattening paper from both sides, make the 'mountain' fold through all the layers along the line of the connection of the 1st and 2nd Ring-Sections, as shown. And make the cornice-like folds, thereby locking the two Ring-Sections.



39  
While you consistently form the cornice-like folds along this Ring-Section, using the existing fold-lines, between each of them, compress the folds as shown to form the star points.

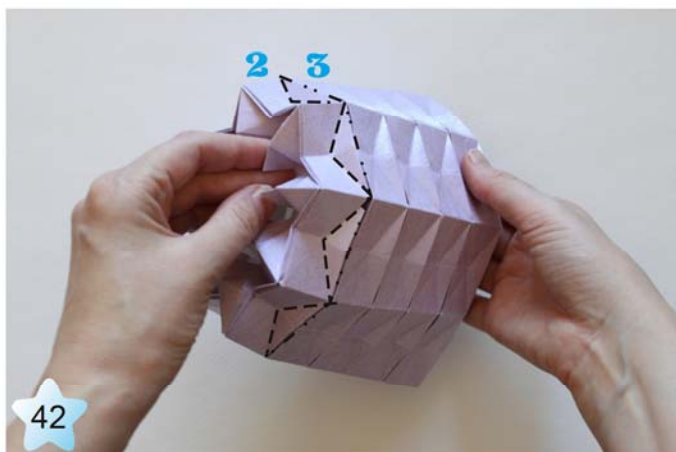


40  
This should be the result. When all the folds along the 1st Ring-Section are formed, consistently compress the folds of each segment to secure them, as shown.



41  
This should be the result. The 1st Ring-Section is formed and now in the same way we will consistently shape each next Ring-Section.





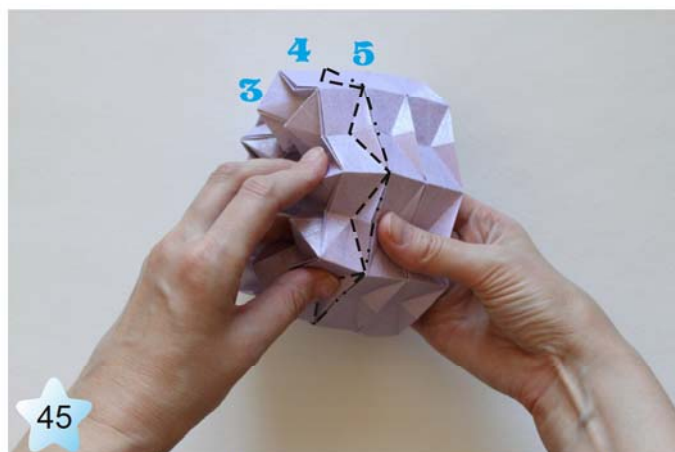
Now working with the connection of the 2nd and 3rd Ring-Sections, make the 'mountain' fold through all the layers along the line of the connection and make the cornice-like folds, thereby locking the two Ring-Sections as shown.



This should be the result. When all the folds along the 2nd Ring-Section are formed, consistently compress the folds of each segment to secure them, as shown.



Move the Ring-Section inside the model a bit. When preliminary folds are well made, the next Ring-Section will fold into the needed position almost automatically. Anyway, repeat steps 42-43 to form the 3rd Ring-Section.



Now working with the connection of the 4th and 5th Ring-Sections, make the 'mountain' fold through all the layers along the line of the connection and make the cornice-like folds, thereby locking the two Ring-Sections as shown.



This should be the result. When all the folds along the 4th Ring-Section are formed, consistently compress the folds of each segment to secure them, as shown.

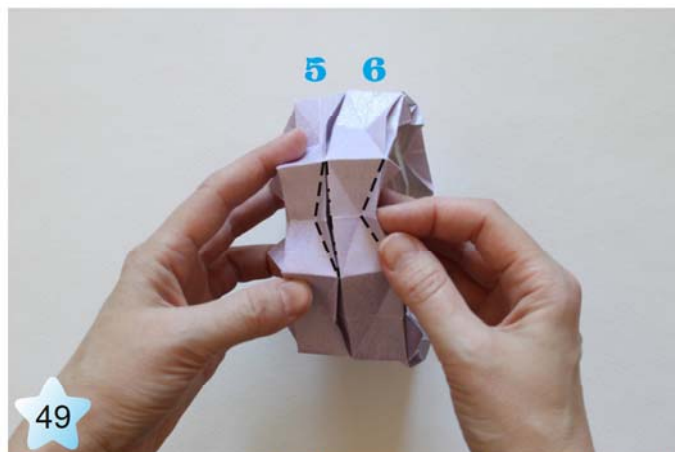


Squeeze the model a bit to secure the previously made folds.





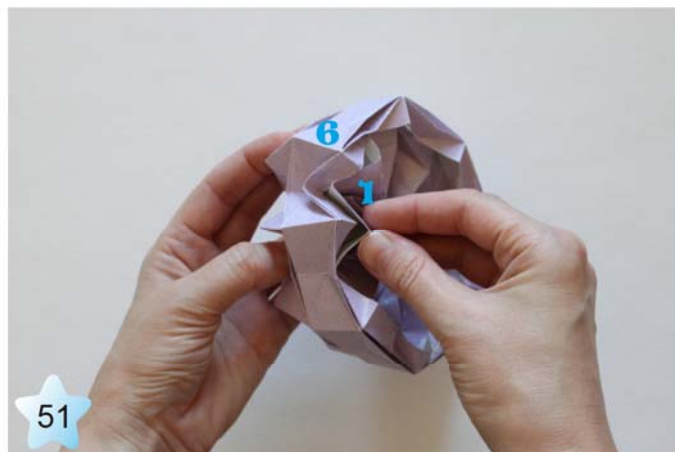
48  
This should be the result. You see that the opening in the middle is narrow now. Keeping the model squeezed a bit, consistently compress the folds of each segment along the one Ring-Module one more time to secure the folds.



49  
Now we'll work with the connection of the 5th and 6th Ring-Sections. Working with one segment on the 6th Ring-Section, close the open folds into a double cornice-like fold as shown.



50  
Keeping the model squeezed a bit, form the 'mountain' fold through all the layers of both Ring-Sections along the line of their connection and make the cornice-like folds, thereby locking the two Ring-Sections as shown.



51  
Keeping the locked segments squeezed a bit, straighten the layers of the 1st Ring-Section, placing them atop of the edge of the 6th Ring-Section as shown.

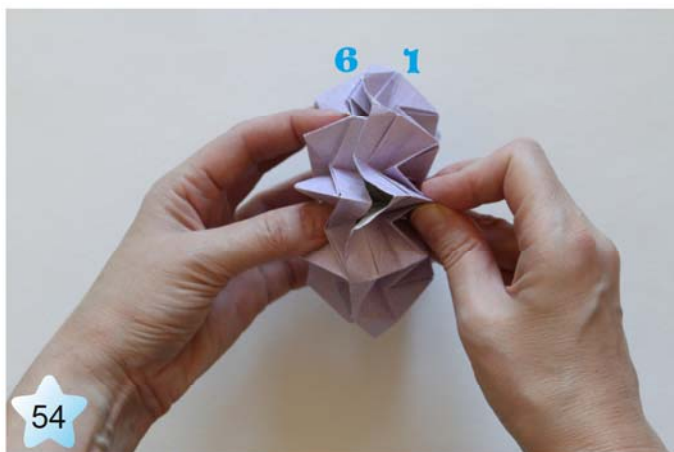


52  
Check that each layer is in the correct place. Then, consistently repeat steps 49 to 51 for next segments. Keep the model squeezed a bit to facilitate the process.



53  
After locking each segment, don't forget to straighten the appropriate layers of the 1st Ring-Section, placing them atop of the edge of the 6th Ring-Section as shown. Do not hurry, checking that each layer is in the correct place.





54 This should be the result. Now all the segments are locked and the layers of the 1st Ring-Section are placed atop the double cornice-like folds of the 6th Ring-Section.



55 Here is the view of the back side with the 1st Ring-Section.



56 Here is the view of the front side with the 6th Ring-Section along the equator. Now, before we'll connect the 6th Ring-Section and the 1st Ring-Section together, let's secure the folds one more time.



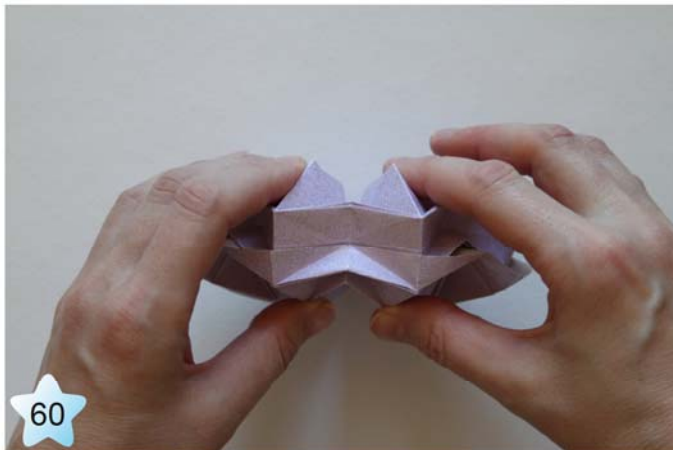
57 Squeeze the model a bit to secure the previously made folds and consistently compress the folds of each segment along the 6th Ring-Module one more time to secure the folds.



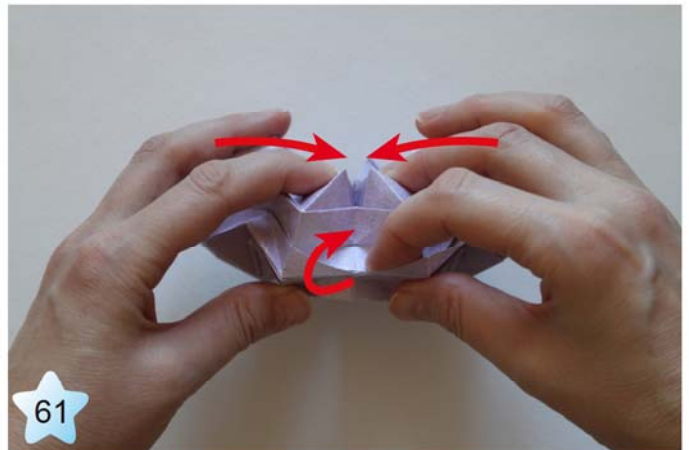
58 Position the 6th Ring-Section along the equator. Working with one segment, compress the top corners a bit as shown and fold the edge of the 1st Ring-Section atop the cornice-like fold of the 6th Ring-Section.



59 This should be the result. Be sure that all folds are aligned and the edge of the 1st Ring-Section covers the cornice-like fold of the 6th Ring-Section.



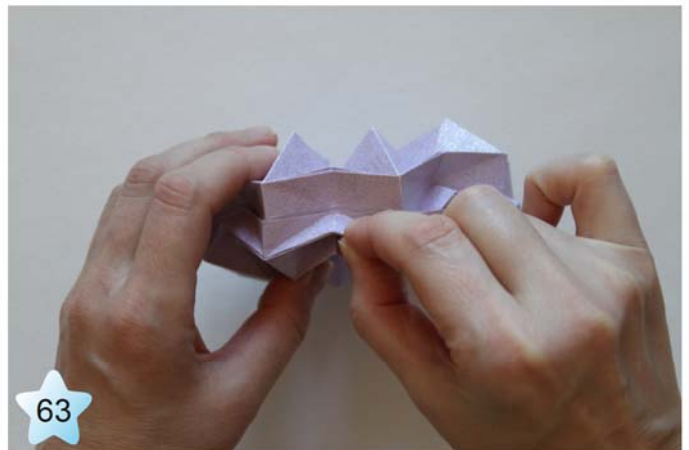
60  
This should be the result. Now repeat the same for the next segment.  
Don't forget that you can lean the model against the table to facilitate the process.



61  
Compress the top corners a bit and fold the edge of the 1st Ring-Section atop the cornice-like fold of the 6th Ring-Section.



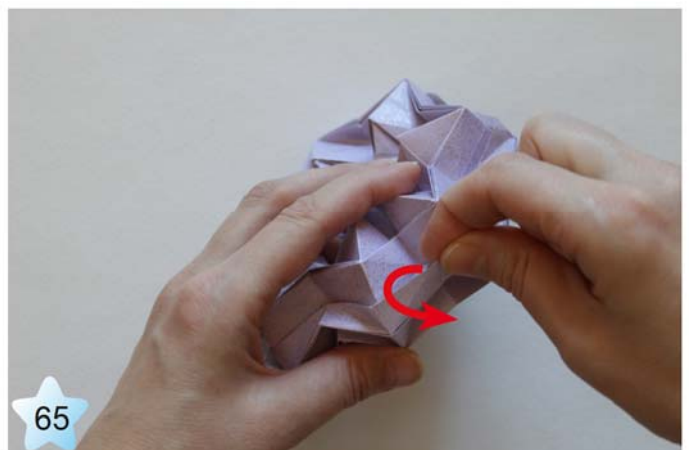
62  
Be sure that all folds are aligned and the edge of the 1st Ring-Section covers the cornice-like fold of the 6th Ring-Section.



63  
Now consistently repeat the same for each next segment, covering the cornice-like fold of the 6th Ring-Section by the edge of the 1st Ring-Section.



64  
This should be the result. The edge of the 1st Ring-Section covers the cornice-like folds of the 6th Ring-Section all over. Now we will connect the 1st Ring-Section and the 6th Ring-Section together.

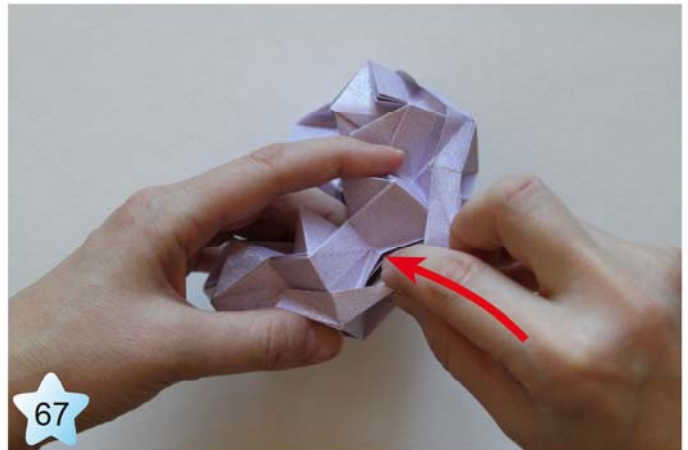


65  
Keeping the top of the model squeezed a bit and working with one segment, open the flap of the 1st Ring-Section as shown.

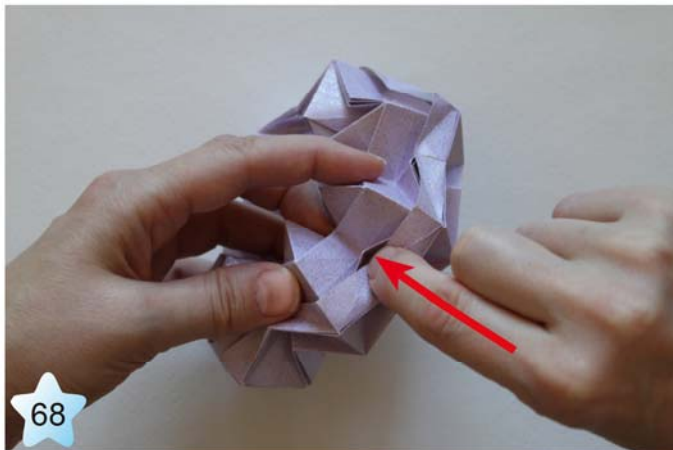




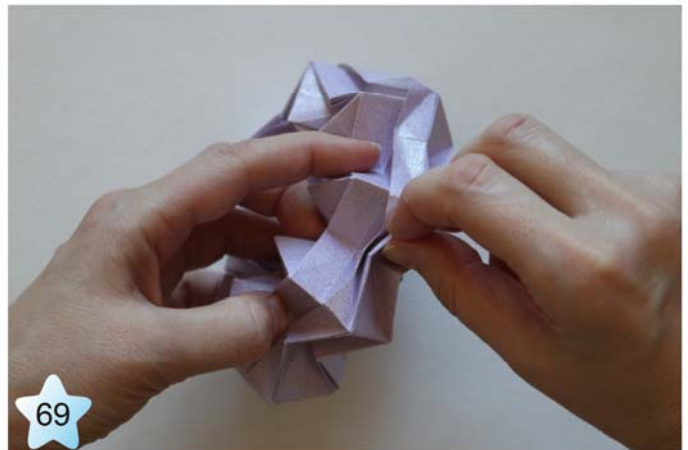
Keep the top of the model squeezed a bit, while opening the flap of the 1st Ring-Section...



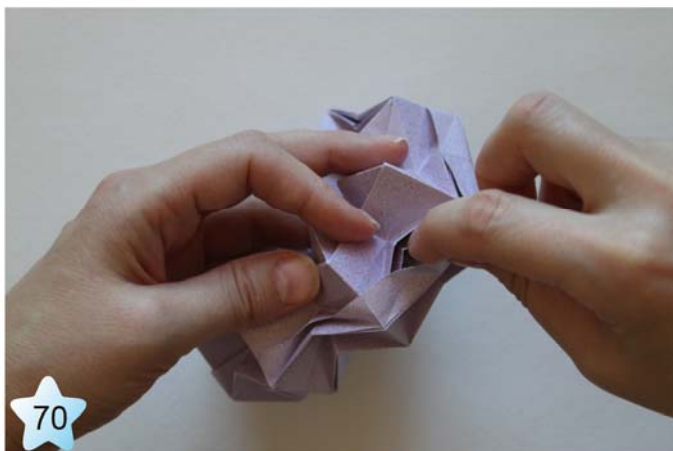
Continue to keep the top of the model squeezed, separate the layers of the double cornice-like fold of the 6th Ring-Section as shown.



Direct the flap of the 1st Ring-Section into the separated layers of the double cornice-like fold of the 6th Ring-Section and insert the centre of the flap of the 1st Ring-Section into the separated layers as shown.



This should be the result. Note, that the centre of the flap of the 1st Ring-Section inserted completely while the sides of the flap are still atop the 6th Ring-Section. Then move to the next segment.

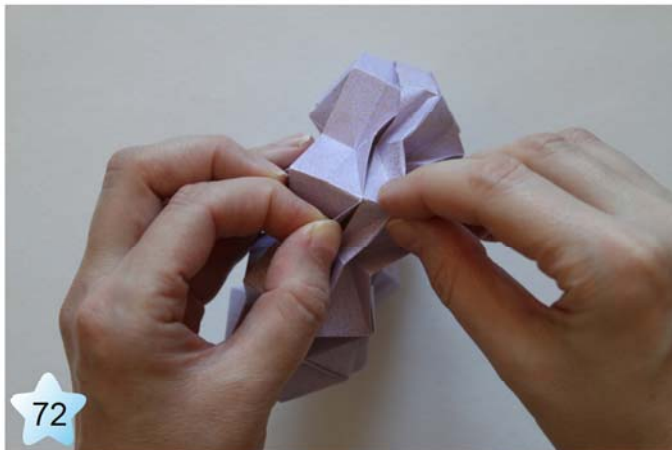


Now repeat steps 65-69 for the next segment, inserting the centre of the flap of the 1st Ring-Section into the separated layers of the double cornice-like fold of the 6th Ring-Section as shown.

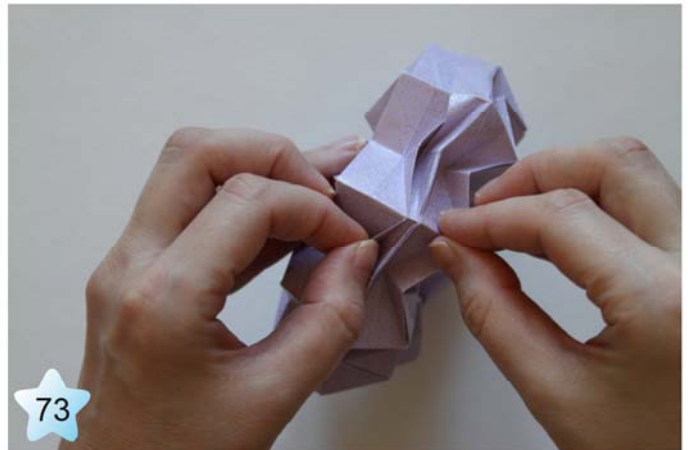


This should be the result. Note, that the flaps are inserted into the pockets only by their centre points; the corner between them are free and atop of the 6th Ring-Section.

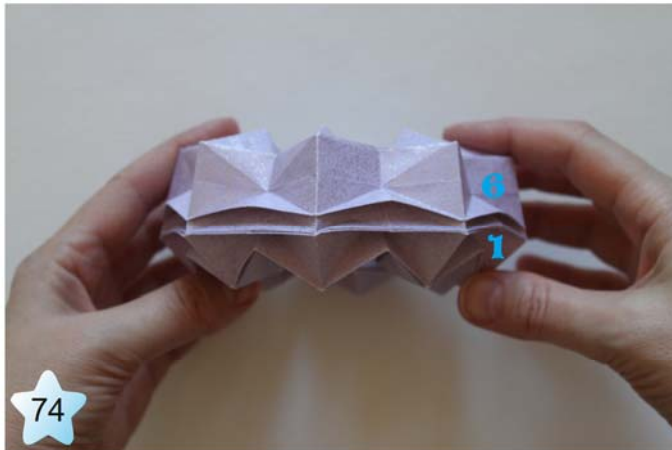




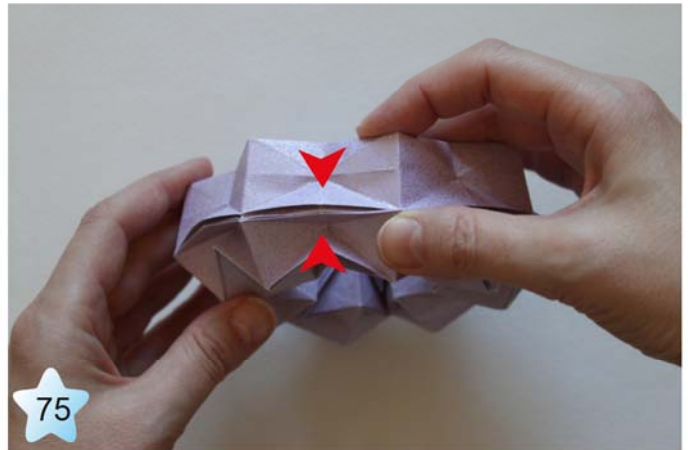
72  
Now opening slightly the cornice-like fold of the 6th Ring-Section as shown, insert half-way the corner of the 1st Ring-Section between the folds as shown.



73  
This should be the result. The two flaps of the 1st Ring-Section and the corner between them are inserted into the 6th Ring-Section. Repeat the same with all the segments. Keep the corners inserted half-way until all the segments are done.



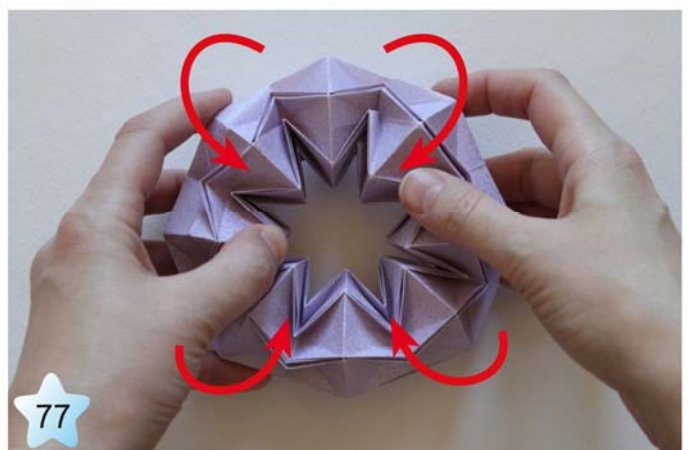
74  
This should be the result. As soon as all the edge of the 1st Ring-Section is inserted half-way into the 6th Ring-Section, gently insert it further as far as it will go.



75  
Working consistently with each segment, accurately pinch all the layers together to form the cornice-like fold and thereby locking the 6th Ring-Section and the 1st Ring-Section together. All the internal layers should accurately coincide.

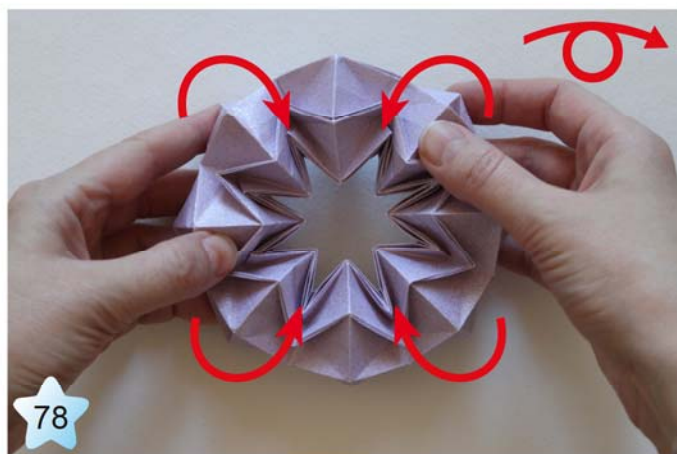


76  
This should be the result. The 6th Ring-Section and the 1st Ring-Section are locked together. Check that all the layers coincide accurately.

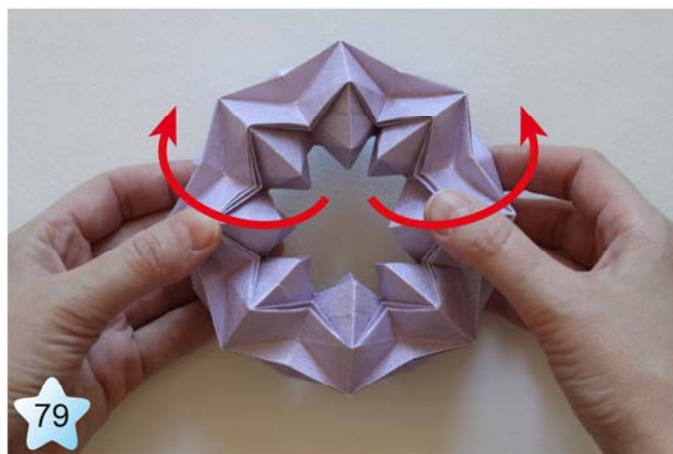


77  
Rotate the model inside a bit, so that the connection of the 6th and 1st Ring-Sections is moving closer to the centre. This way we are securing the folds step-by-step.





Continue to rotate the model inside a bit further, so that the connection of the 6th and 1st Ring-Sections is moving into the centre. Then, turn the model over.



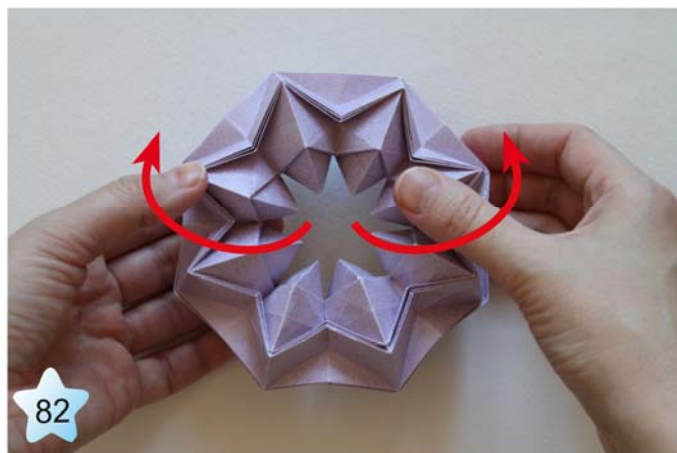
This should be the result. Now, gently rotate the model from inside to outside, so that the Ring-Sections are moving from the centre, making the full cycle, so that the connection of the 1st and 6th Ring-Sections is near the centre again.



Now squeeze the model to the centre, thereby securing the folds.



Keeping the model squeezed a bit, consistently compress the folds of each segment along the one Ring-Section to secure the folds. Then, rotate the model some more to work with each next Ring-Section in the same way.

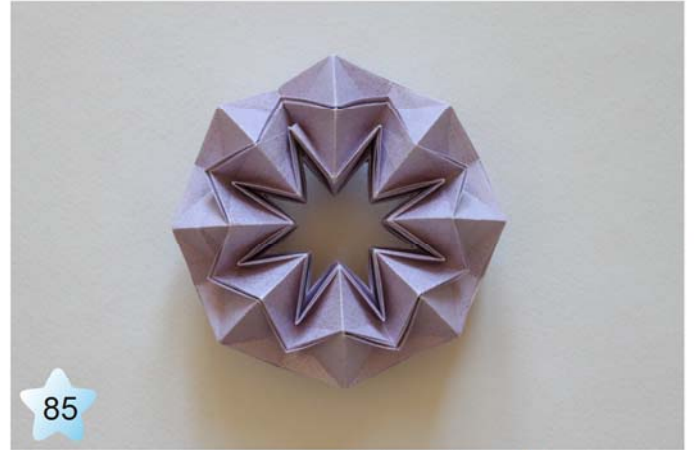
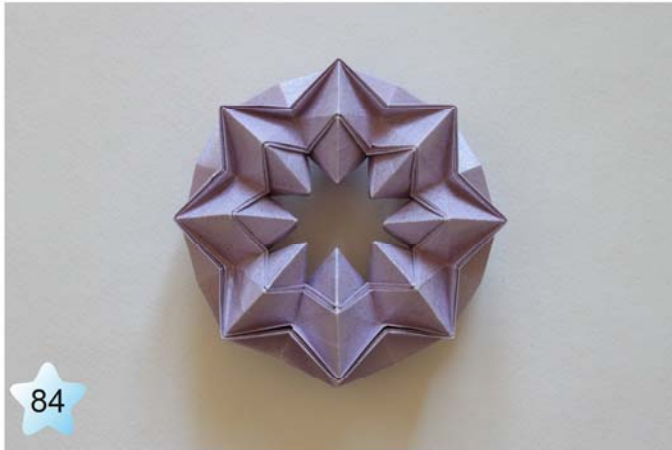


This should be the result. Now rotate the star from inside to outside a few cycles. It should go rather smooth. If rotating is still not smooth enough repeat steps 80-81 one more time.



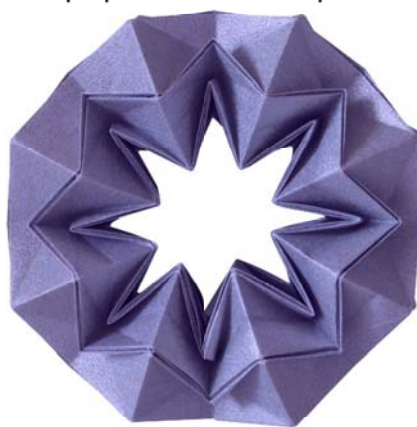
Remember – always compress the folds only from the front side of the star! Squeeze the model to the centre, thereby securing the folds and compress the folds of each segment on each Ring-Section. Then test the model again.





Here is the completed One-Piece Magic Star!!! Here is the back side of One-Piece Magic Star.

Congratulation!!! You folded the fantastic Oriland Magic Star from one piece of paper - it was quite a challenge!



## Colouring One-Piece Magic Star

As was mentioned earlier in this article, you can colour the paper in a specific pattern to receive the rainbow effect of changing colour rings on this star. Or, you may fold the star first and then colour its rings into desired colours. Acrylic paints work well for this project, as they easy to work with and dry to a permanent, water-resistant finish.



One-Piece Magic Star © 1997 Yuri Shumakov - page 21





When paint the rainbow rings on the completed star, work consistently ring by ring, letting the paint dry before starting to paint each next ring.



Position the ring on the equator and diligently place the paint with a brush, working on every fold. Let the paint dry. Then paint the next ring.



Congratulation!!! You folded the fantastic Oriland Magic Star!  
When the star is rotated, the changing pattern of folds and colours produce a mesmerizing effect!  
Enjoy this amazing action model and experience the mystery of Oriland Magic Star yourself!

**ORILAND**  
What Origami Can Be!

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## About Authors

Katrin and Yuri Shumakov are internationally recognized professional origami artists. First introduced to origami in France in 1989, they developed this art in a heretofore unseen way. Residents of Toronto, Canada and authors of many origami books, they share their art with the world.

They created the fantastic Oriland world, which consists of amazing creations: goblins and wizards, castles of magical wonder, dragons, princesses, trees and flowers, sailing ships and sea creatures, dinosaur skeletons and so much more including elegant floral arrangements they call Oribana. Their origami designs have been exhibited in different countries across the globe.

Psychologists by education, their Ph.D scientific work showed how origami helps the development of children: creates conditions of intensive interaction of the brain's hemispheres and effectively allows development of motor skills of both hands, intellectual and creative abilities.

Yuri and Katrin Shumakov have done Internet projects including this multiple award winning Oriland.com, acknowledged as a high quality creative, educational and fun website for children and adults. They suggest that Origami is entertainment for the Soul, gymnastics for the Mind and training for the Hands.

Enjoy Oriland & see what origami can be!



**Action Origami Series**

**Oriland Magic Star**

*Yuri & Katrin Shumakov*

[www.oriland.com](http://www.oriland.com)